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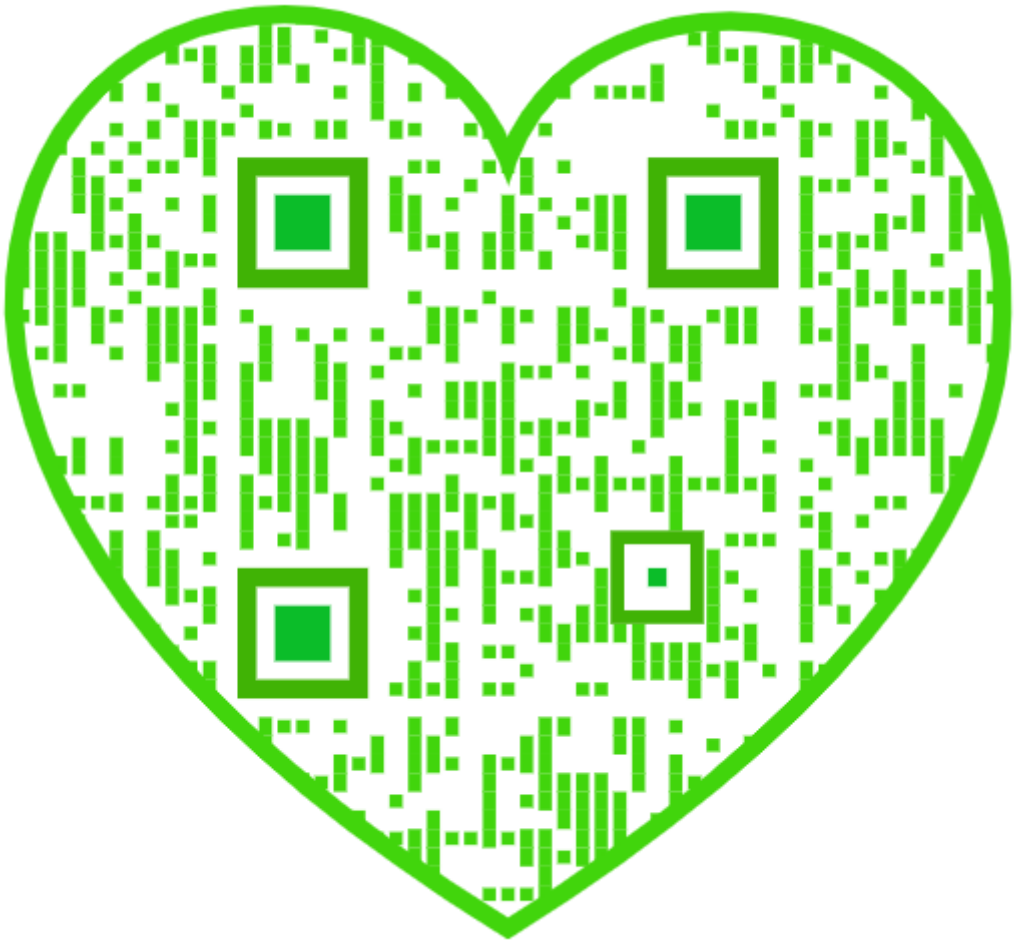
METEOROLOGICAL TABLES

GUYOT



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A

COLLECTION

OF

METEOROLOGICAL TABLES,

WITH

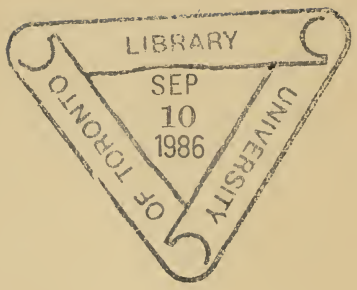
OTHER TABLES USEFUL IN PRACTICAL METEOROLOGY.

PREPARED BY ORDER OF THE SMITHSONIAN INSTITUTION

BY

ARNOLD GUYOT.

WASHINGTON:
PUBLISHED BY THE SMITHSONIAN INSTITUTION.
1852.



CAMBRIDGE:

STEREOTYPED BY METCALF AND COMPANY,

PRINTERS TO THE UNIVERSITY.

TO PROF. JOSEPH HENRY,

Secretary of the Smithsonian Institution.

Sir, —

In compliance with your instructions, I have prepared the collection of Meteorological Tables contained in the following pages. I have endeavored to render it useful, not only to the observers engaged in the system of Meteorological Observations now in operation under the direction of the Smithsonian Institution, for whom it was immediately designed, but also to any Meteorologist who may desire to compare and to work out portions of the vast amount of Meteorological Observations already accumulated in the stores of science.

The reduction of the observations and the extensive comparisons, without which Meteorology can do but little, require an amount of mechanical labor which renders it impossible for most observers to deduce for themselves the results of their own observations. The difficulty is still further increased by the diversity of the thermometrical and barometrical scales which Meteorologists, faithful to old habits rather than to science and to reason, choose to retain, notwithstanding the additional labor they thus gratuitously assume to themselves. To relieve the Meteorologist of a great portion of this labor, by means of tables sufficiently extensive to render calculations and even interpolations unnecessary, is to save his time and his forces in favor of science itself, and thus materially contribute to its advancement. But most of the tables useful in Meteorology being scattered through many volumes, which are often not of easy access, this collection will be, it is hoped, acceptable to the friends of Meteorology, and will supply a want very much felt in this department of the physical sciences.

In the selection of the matter, I have been guided by the idea that the tables which I sought for my own use might also be those most likely to be wanted by others. But I wish the following to be considered as a first collection, containing only the tables most appropriate to the present purpose. They are, therefore, arranged in different and independent series, with distinct paging, but constituting together a frame-work into which any tables may be readily inserted when wanted, either to make the collection more complete, or to present a choice of tables calculated from somewhat different elements, or adapted to various methods of calculation.

The measurement of heights by means of the barometer being intimately connected with Meteorology, it was thought not inappropriate to admit into this collection Hypsometrical Tables, destined to render this kind of calculations more easy and more rapid, and thus to increase the taste for a method so useful in physical geography. I have preferred the tables of Delcros, as uniting in the greatest degree simplicity and accuracy. Those of Gauss, Bessel, and Baily may be given afterwards.

Every table contains directions for its use, when necessary; moreover, the indication of the elements used in its calculation, and of the source from which it has been taken. When no remark is made as to this last point, the table has been expressly calculated for this volume; in this case it is marked with an asterisk (*) in the general table of contents.

Very respectfully,

Your obedient servant,

A. GUYOT.

CAMBRIDGE, MASS., *December 15th*, 1851.

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"	VII.	Boothia Felix, Arctic America,	69° 59′	N.	Reaum.	D.

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THERMOMETRICAL TABLES.

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COMPARISON OF THE THERMOMETRICAL SCALES.

The first three tables of this set give a simultaneous comparison of the three scales mostly used at present in Meteorology, and especially of the portion of the scales not comprised in the more extensive tables which follow them. They form thus a complement to these last tables; but as most of the temperatures contained in them do not occur in Meteorology, the comparison of the full degrees was found sufficient.

These three tables have been taken from E. L. Schubarth's Collection of Physical Tables. Berlin, 1836.

Tables IV. to IX. being more useful to the Meteorologist, the calculation has been carried out for every tenth of a degree. Tables VII. and IX. are from the *Annuaire Météorologique de France;* the others have been calculated.

A comparison of the Centigrade and Fahrenheit degrees near the boiling point, for every tenth of a degree, for the sake of the comparison of standard thermometers, will be found at the end of Table VI.

I. COMPARISON OF FAHRENHEIT'S THERMOMETRICAL SCALE WITH THE CENTIGRADE AND REAUMUR'S.

$x°$ Fahr. $= (x° - 32°)\ \frac{5}{9}$ Centig. $= (x° - 32°)\ \frac{4}{9}$ Reaum.

Fahren.	Centigrade.	Reaumur.	Fahren.	Centigrade.	Reaumur.	Fahren.	Centigrade.	Reaumur.
+212	+100.00	+80.00	+172	+77.78	+62.22	+132	+55.55	+44.44
211	99.44	79.56	171	77.22	61.78	131	55.00	44.00
210	98.89	79.11	170	76.67	61.33	130	54.44	43.56
209	98.33	78.67	169	76.11	60.89	129	53.89	43.11
208	97.78	78.22	168	75.55	60.44	128	53.33	42.67
207	97.22	77.78	167	75.00	60.00	127	52.78	42.22
206	96.67	77.33	166	74.44	59.56	126	52.22	41.78
205	96.11	76.89	165	73.89	59.11	125	51.67	41.33
204	95.55	76.44	164	73.33	58.67	124	51.11	40.89
203	95.00	76.00	163	72.78	58.22	123	50.55	40.44
202	94.44	75.56	162	72.22	57.78	122	50.00	40.00
201	93.89	75.11	161	71.67	57.33	121	49.44	39.56
200	93.33	74.67	160	71.11	56.89	120	48.89	39.11
199	92.78	74.22	159	70.55	56.44	119	48.33	38.67
198	92.22	73.78	158	70.00	56.00	118	47.78	38.22
197	91.67	73.33	157	69.44	55.56	117	47.22	37.78
196	91.11	72.89	156	68.89	55.11	116	46.67	37.33
195	90.55	72.44	155	68.33	54.67	115	46.11	36.89
194	90.00	72.00	154	67.78	54.22	114	45.55	36.44
193	89.44	71.56	153	67.22	53.78	113	45.00	36.00
192	88.89	71.11	152	66.67	53.33	112	44.44	35.56
191	88.33	70.67	151	66.11	52.89	111	43.89	35.11
190	87.78	70.22	150	65.55	52.44	110	43.33	34.67
189	87.22	69.78	149	65.00	52.00	109	42.78	34.22
188	86.67	69.33	148	64.44	51.56	108	42.22	33.78
187	86.11	68.89	147	63.89	51.11	107	41.67	33.33
186	85.55	68.44	146	63.33	50.67	106	41.11	32.89
185	85.00	68.00	145	62.78	50.22	105	40.55	32.44
184	84.44	67.56	144	62.22	49.78	104	40.00	32.00
183	83.89	67.11	143	61.67	49.33	103	39.44	31.56
182	83.33	66.67	142	61.11	48.89	102	38.89	31.11
181	82.78	66.22	141	60.55	48.44	101	38.33	30.67
180	82.22	65.78	140	60.00	48.00	100	37.78	30.22
179	81.67	65.33	139	59.44	47.56	99	37.22	29.78
178	81.11	64.89	138	58.89	47.11	98	36.67	29.33
177	80.55	64.44	137	58.33	46.67	97	36.11	28.89
176	80.00	64.00	136	57.78	46.22	96	35.55	28.44
175	79.44	63.56	135	57.22	45.78	95	35.00	28.00
174	78.89	63.11	134	56.67	45.33	94	34.44	27.56
173	78.33	62.67	133	56.11	44.89	93	33.89	27.11

x^{o} Fahr. = $(x^{o} - 32^{o})\ \frac{5}{9}$ Centig. = $(x^{o} - 32^{o})\ \frac{4}{9}$ Reaum.

Fahren.	Centigrade.	Reaumur.	Fahren.	Centigrade.	Reaumur.	Fahren.	Centigrade.	Reaumur.
+92	+33.33	+26.67	+48	+ 8.89	+ 7.11	+ 4	−15.55	−12.44
91	32.78	26.22	47	8.33	6.67	3	−16.11	−12.89
90	32.22	25.78	46	7.78	6.22	2	−16.67	−13.33
89	31.67	25.33	45	7.22	5.78	1	−17.22	−13.78
88	31.11	24.89	44	6.67	5.33	0	−17.78	−14.22
87	30.55	24.44	43	6.11	4.89	− 1	−18.33	−14.67
86	30.00	24.00	42	5.55	4.44	− 2	−18.89	−15.11
85	29.44	23.56	41	5.00	4.00	− 3	−19.44	−15.56
84	28.89	23.11	40	4.44	3.56	− 4	−20.00	−16.00
83	28.33	22.67	39	3.89	3.11	− 5	−20.55	−16.44
82	27.78	22.22	38	3.33	2.67	− 6	−21.11	−16.89
81	27.22	21.78	37	2.78	2.22	− 7	−21.67	−17.33
80	26.67	21.33	36	2.22	1.78	− 8	−22.22	−17.78
79	26.11	20.89	35	1.67	1.33	− 9	−22.78	−18.22
78	25.55	20.44	34	1.11	0.89	−10	−23.33	−18.67
77	25.00	20.00	33	0.55	0.44	−11	−23.89	−19.11
76	24.44	19.56	32	0.00	0.00	−12	−24.44	−19.56
75	23.89	19.11	31	− 0.55	− 0.44	−13	−25.00	−20.00
74	23.33	18.67	30	− 1.11	− 0.89	−14	−25.55	−20.44
73	22.78	18.22	29	− 1.67	− 1.33	−15	−26.11	−20.89
72	22.22	17.78	28	− 2.22	− 1.78	−16	−26.67	−21.33
71	21.67	17.33	27	− 2.78	− 2.22	−17	−27.22	−21.78
70	21.11	16.89	26	− 3.33	− 2.67	−18	−27.78	−22.22
69	20.55	16.44	25	− 3.89	− 3.11	−19	−28.33	−22.67
68	20.00	16.00	24	− 4.44	− 3.56	−20	−28.89	−23.11
67	19.44	15.56	23	− 5.00	− 4.00	−21	−29.44	−23.56
66	18.89	15.11	22	− 5.55	− 4.44	−22	−30.00	−24.00
65	18.33	14.67	21	− 6.11	− 4.89	−23	−30.55	−24.44
64	17.78	14.22	20	− 6.67	− 5.33	−24	−31.11	−24.89
63	17.22	13.78	19	− 7.22	− 5.78	−25	−31.67	−25.33
62	16.67	13.33	18	− 7.78	− 6.22	−26	−32.22	−25.78
61	16.11	12.89	17	− 8.33	− 6.67	−27	−32.78	−26.22
60	15.55	12.44	16	− 8.89	− 7.11	−28	−33.33	−26.67
59	15.00	12.00	15	− 9.44	− 7.56	−29	−33.89	−27.11
58	14.44	11.56	14	−10.00	− 8.00	−30	−34.44	−27.56
57	13.89	11.11	13	−10.55	− 8.44	−31	−35.00	−28.00
56	13.33	10.67	12	−11.11	− 8.89	−32	−35.55	−28.44
55	12.78	10.22	11	−11.67	− 9.33	−33	−36.11	−28.89
54	12.22	9.78	10	−12.22	− 9.78	−34	−36.67	−29.33
53	11.67	9.33	9	−12.78	−10.22	−35	−37.22	−29.78
52	11.11	8.89	8	−13.33	−10.67	−36	−37.78	−30.22
51	10.55	8.44	7	−13.89	−11.11	−37	−38.33	−30.67
50	10.00	8.00	6	−14.44	−11.56	−38	−38.89	−31.11
49	9.44	7.56	5	−15.00	−12.00	−39	−39.44	−31.56

For the Continuation see Table IV. and V.

II. COMPARISON OF THE CENTIGRADE THERMOMETER WITH REAUMUR'S AND FAHRENHEIT'S.

$x°$ Centig. $= (32 + \frac{4}{5}\,x°)$ Fahr. $= \frac{4}{5}\,x°$ Reaum.

Centig.	Reaumur.	Fahrenheit.	Centig.	Reaumur.	Fahrenheit.	Centig.	Reaumur.	Fahrenheit.
+100	+80.0	+212.0	+83	+66.4	+181.4	+66	+52.8	+150.8
99	79.2	210.2	82	65.6	179.6	65	52.0	149.0
98	78.4	208.4	81	64.8	177.8	64	51.2	147.2
97	77.6	206.6	80	64.0	176.0	63	50.4	145.4
96	76.8	204.8	79	63.2	174.2	62	49.6	143.6
95	76.0	203.0	78	62.4	172.4	61	48.8	141.8
94	75.2	201.2	77	61.6	170.6	60	48.0	140.0
93	74.4	199.4	76	60.8	168.8	59	47.2	138.2
92	73.6	197.6	75	60.0	167.0	58	46.4	136.4
91	72.8	195.8	74	59.2	165.2	57	45.6	134.6
90	72.0	194.0	73	58.4	163.4	56	44.8	132.8
89	71.2	192.2	72	57.6	161.6	55	44.0	131.0
88	70.4	190.4	71	56.8	159.8	54	43.2	129.2
87	69.6	188.6	70	56.0	158.0	53	42.4	127.4
86	68.8	186.8	69	55.2	156.2	52	41.6	125.6
85	68.0	185.0	68	54.4	154.4	51	40.8	123.8
84	67.2	183.2	67	53.6	152.6	50	40.0	122.0

For the Continuation see Tables V. and VI.

III. COMPARISON OF REAUMUR'S THERMOMETER WITH FAHRENHEIT'S AND THE CENTIGRADE

$x°$ Reaum $= (32° + \frac{9}{4}\,x°)$ Fahr. $= \frac{5}{4}\,x°$ Centig.

Reaumur.	Fahrenheit.	Centigrade.	Reaumur.	Fahrenheit.	Centigrade.	Reaumur.	Fahrenheit.	Centigrade.
+80	+212.00	+100.00	+66	+180.50	+82.50	+52	+149.00	+65.00
79	209.75	98.75	65	178.25	81.25	51	146.75	63.75
78	207.50	97.50	64	176.00	80.00	50	144.50	62.50
77	205.25	96.25	63	173.75	78.75	49	142.25	61.25
76	203.00	95.00	62	171.50	77.50	48	140.00	60.00
75	200.75	93.75	61	169.25	76.25	47	137.75	58.75
74	198.50	92.50	60	167.00	75.00	46	135.50	57.50
73	196.25	91.25	59	164.75	73.75	45	133.25	56.25
72	194.00	90.00	58	162.50	72.50	44	131.00	55.00
71	191.75	88.75	57	160.25	71.25	43	128.75	53.75
70	189.50	87.50	56	158.00	70.00	42	126.50	52.50
69	187.25	86.25	55	155.75	68.75	41	124.25	51.25
68	185.00	85.00	54	153.50	67.50	40	122.00	50.00
67	182.75	83.75	53	151.25	66.25	39	119.75	48.75

For the Continuation see Tables VIII. and IX.

Degrees of Fahrenheit.	Tenths of Degrees.									
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**
	Centig.	Centig.	Centig.	Centig.	Centig.	Centig.	Centig.	Centig.	Centig.	Centig.
+122	+50.00	+50.06	+50.11	+50.16	+50.22	+50.28	+50.33	+50.39	+50.44	+50.50
121	49.44	49.50	49.55	49.61	49.67	49.72	49.78	49.83	49.89	49.94
120	48.89	49.94	49.00	49.06	49.12	49.17	49.22	49.28	49.33	49.39
119	48.33	48.39	48.44	48.50	48.56	48.61	48.67	48.72	48.78	48.83
118	47.78	47.83	47.89	47.94	48.00	48.05	48.11	48.17	48.22	48.28
117	47.22	47.28	47.33	47.38	47.44	47.50	47.55	47.61	47.66	47.72
116	46.67	46.72	46.78	46.83	46.89	46.94	47.00	47.05	47.11	47.17
115	46.11	46.17	46.22	46.27	46.33	46.39	46.44	46.50	46.55	46.61
114	45.55	45.61	45.67	45.72	45.78	45.83	45.89	45.94	46.00	46.05
113	45.00	45.06	45.11	45.16	45.22	45.28	45.33	45.39	45.44	45.50
112	44.44	44.50	44.56	44.61	44.67	44.72	44.78	44.83	44.89	44.94
111	43.89	43.94	43.99	44.05	44.11	44.17	44.22	44.28	44.33	44.39
110	43.33	43.39	43.44	43.49	43.55	43.61	43.67	43.72	43.78	43.83
109	42.78	42.83	42.89	42.94	43.00	43.05	43.11	43.17	43.22	43.28
108	42.22	42.28	42.33	42.38	42.44	42.50	42.56	42.61	42.66	42.72
107	41.67	41.72	41.77	41.83	41.89	41.94	42.00	42.05	42.11	42.17
106	41.11	41.17	41.22	41.27	41.33	41.38	41.44	41.50	41.55	41.61
105	40.55	40.61	40.67	40.72	40.78	40.83	40.89	40.94	41.00	41.05
104	40.00	40.06	40.11	40.16	40.22	40.28	40.33	40.39	40.44	40.50
103	39.44	39.50	39.55	39.61	39.67	39.72	39.78	39.83	39.89	39.94
102	38.89	38.94	39.00	39.05	39.11	39.16	39.22	39.27	39.33	39.39
101	38.33	38.39	38.44	38.50	38.56	38.61	38.67	38.72	38.78	38.83
100	37.78	37.83	37.89	37.94	37.99	38.05	38.11	38.16	38.22	38.28
99	37.22	37.28	37.33	37.39	37.44	37.50	37.56	37.61	37.67	37.72
98	36.67	36.72	36.78	36.83	36.89	36.94	37.00	37.05	37.11	37.17
97	36.11	36.17	36.22	36.27	36.33	36.38	36.44	36.50	36.55	36.61
96	35.55	35.60	35.66	35.72	35.77	35.83	35.89	35.94	36.00	36.05
95	35.00	35.06	35.11	35.16	35.22	35.27	35.33	35.39	35.44	35.50
94	34.44	34.50	34.56	34.61	34.66	34.72	34.78	34.83	34.89	34.94
93	33.89	33.94	34.00	34.05	34.11	34.16	34.22	34.28	34.33	34.39
92	33.33	33.39	33.44	33.50	33.55	33.61	33.67	33.72	33.78	33.83
91	32.78	32.83	32.89	32.94	33.00	33.05	33.11	33.17	33.22	33.28
90	32.22	32.28	32.33	32.39	32.44	32.50	32.56	32.61	32.67	32.72
89	31.67	31.72	31.78	31.83	31.89	31.94	31.99	32.06	32.11	33.17
88	31.11	31.17	31.22	31.28	31.33	31.38	31.44	31.50	31.55	31.61
87	30.55	30.60	30.66	30.72	30.77	30.83	30.88	30.94	31.00	31.05
86	30.00	30.06	30.11	30.16	30.22	30.27	30.33	30.39	30.44	30.50
85	29.44	29.50	29.55	29.61	29.66	29.72	29.77	29.83	29.89	29.94
84	28.89	28.94	29.00	29.05	29.11	29.16	29.22	29.28	29.33	29.39
83	28.33	28.39	28.44	28.50	28.55	28.61	28.66	28.72	28.78	28.83
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**

Degrees of Fahrenheit.	Tenths of Degrees.									
	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.
	Centig.	Centig.	Centig.	Centig.	Centig.	Centig.	Centig.	Centig.	Centig.	Centig.
+82	+27.78	+27.83	+27.89	+27.94	+28.00	+28.05	+28.11	+28.17	+28.22	+28.28
81	27.22	27.28	27.33	27.39	27.44	27.50	27.55	27.61	27.67	27.72
80	26.67	26.72	26.78	26.83	26.89	26.94	27.00	27.06	27.11	27.17
79	26.11	26.17	26.22	26.28	26.33	26.39	26.44	26.50	26.55	26.61
78	25.55	25.60	25.66	25.72	25.78	25.83	25.89	25.94	26.00	26.06
77	25.00	25.06	25.11	25.16	25.22	25.28	25.33	25.39	25.44	25.50
76	24.44	24.50	24.55	24.61	24.66	24.72	24.78	24.83	24.89	24.94
75	23.89	23.94	24.00	24.05	24.11	24.16	24.22	24.27	24.33	24.39
74	23.33	23.39	23.44	23.50	23.55	23.61	23.66	23.72	23.78	23.83
73	22.78	22.83	22.89	22.94	23.00	23.05	23.11	23.16	23.22	23.28
72	22.22	22.28	22.33	22.39	22.44	22.50	22.55	22.61	22.67	22.72
71	21.67	21.72	21.78	21.83	21.89	21.94	22.00	22.05	22.11	22.17
70	21.11	21.17	21.22	21.28	21.33	21.39	21.44	21.50	21.55	21.61
69	20.55	20.61	20.67	20.72	20.78	20.83	20.89	20 94	21.00	21.06
68	20.00	20.06	20.11	20.16	20.22	20.27	20.33	20.39	20.44	20.50
67	19.44	19.50	19.55	19.61	19.66	19.72	19.78	19.83	19.89	19.94
66	18.89	18.94	19.00	19.05	19.11	19.16	19.22	19.28	19.33	19.39
65	18.33	18.39	18.44	18.50	18.55	18.61	18.66	18.72	18.78	18.83
64	17.78	17.83	17.89	17.94	18.00	18.05	18.11	18.16	18.22	18.28
63	17.22	17.28	17.33	17.39	17.44	17.50	17.55	17.61	17.67	17.72
62	16.67	16.72	16.78	16.83	16.89	16.94	17.00	17.05	17.11	17.17
61	16.11	16.17	16.22	16.28	16.33	16.39	16.44	16.50	16.55	16.61
60	15.55	15.60	15.66	15.72	15.78	15.83	15.89	15.94	16.00	16.06
59	15.00	15.06	15.11	15.17	15.22	15.28	15.33	15.39	15.44	15.50
58	14.44	14.50	14.55	14.61	14.67	14.72	14.78	14.83	14.89	14.94
57	13.89	13.94	14.00	14.06	14.11	14.16	14.22	14.28	14.33	14.39
56	13.33	13.39	13.44	13.50	13.56	13.61	13.66	13.72	13.78	13.83
55	12.78	12.83	12.89	12.94	13.00	13.05	13.11	13.16	13.22	13.28
54	12.22	12.27	12.33	12.39	12.44	12.50	12.55	12.61	12.67	12.72
53	11.67	11.72	11.78	11.84	11.89	11.94	12.00	12.05	12.11	12.16
52	11.11	11.17	11.22	11.28	11.33	11.39	11.44	11.50	11.55	11.61
51	10.55	10.61	10.67	10.73	10.78	10.83	10.89	10.94	11.00	11.05
50	10.00	10.06	10.11	10.17	10.22	10.28	10.33	10.39	10.44	10.50
49	9.44	9.50	9.56	9.61	9.66	9.72	9.78	9.83	9.89	9.94
48	8.89	8.94	9.00	9.05	9.11	9.16	9.22	9.28	9.33	9.39
47	8.33	8.39	8.44	8.50	8.55	8.61	8.66	8.72	8.78	8.83
46	7.78	7.83	7.89	7.94	8.00	8.05	8.11	8.16	8.22	8.28
45	7.22	7.28	7.33	7.39	7.44	7.50	7.55	7.61	7.67	7.72
44	6.67	6.72	6.78	6.83	6.89	6.94	7.00	7.05	7.11	7.16
43	6.11	6.17	6.22	6.28	6.33	6.39	6.44	6.50	6.55	6.61
	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.

Degrees of Fahrenheit.	Tenths of Degrees.									
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**
	Centig.	Centig.	Centig.	Centig.	Centig.	Centig.	Centig.	Centig.	Centig.	Centig.
+42	+5.55	+5.61	+5.66	+5.72	+5.77	+5.83	+5.89	+5.94	+6.00	+6.05
41	5.00	5.06	5.11	5.16	5.22	5.28	5.33	5.39	5.44	5.50
40	4.44	4.50	4.55	4.61	4.66	4.72	4.78	4.83	4.89	4.94
39	3.89	3.94	4.00	4.05	4.11	4.16	4.22	4.28	4.33	4.39
38	3.33	3.39	3.44	3.50	3.55	3.61	3.66	3.72	3.78	3.83
37	2.78	2.83	2.89	2.94	3.00	3.05	3.11	3.17	3.22	3.28
36	2.22	2.28	2.33	2.39	2.44	2.50	2.55	2.61	2.67	2.72
35	1.67	1.72	1.78	1.83	1.89	1.94	2.00	2.06	2.11	2.17
34	1.11	1.17	1.22	1.28	1.33	1.39	1.44	1.50	1.56	1.61
33	0.55	0.61	0.67	0.72	0.78	0.83	0.89	0.94	1.00	1.06
32	0.00	0.06	0.11	0.17	0.22	0.28	0.33	0.39	0.44	0.50
31	− 0.55	− 0.50	− 0.44	− 0.39	− 0.33	− 0.28	− 0.22	− 0.17	− 0.11	− 0.06
30	− 1.11	− 1.06	− 1.00	− 0.94	− 0.89	− 0.83	− 0.78	− 0.72	− 0.67	− 0.61
29	− 1.67	− 1.61	− 1.56	− 1.50	− 1.44	− 1.39	− 1.33	− 1.28	− 1.22	− 1.17
28	− 2.22	− 2.17	− 2.11	− 2.06	− 2.00	− 1.94	− 1.89	− 1.83	− 1.78	− 1.72
27	− 2.78	− 2.72	− 2.67	− 2.61	− 2.55	− 2.50	− 2.44	− 2.39	− 2.33	− 2.28
26	− 3.33	− 3.28	− 3.22	− 3.17	− 3.11	− 3.06	− 3.00	− 2.94	− 2.89	− 2.83
25	− 3.89	− 3.83	− 3.78	− 3.72	− 3.66	− 3.61	− 3.55	− 3.50	− 3.44	− 3.39
24	− 4.44	− 4.39	− 4.33	− 4.28	− 4.22	− 4.17	− 4.11	− 4.06	− 4.00	− 3.94
23	− 5.00	− 4.94	− 4.89	− 4.83	− 4.78	− 4.72	− 4.67	− 4.61	− 4.55	− 4.50
22	− 5.55	− 5.50	− 5.44	− 5.39	− 5.33	− 5.28	− 5.22	− 5.17	− 5.11	− 5.06
21	− 6.11	− 6.05	− 6.00	− 5.94	− 5.89	− 5.83	− 5.78	− 5.72	− 5.67	− 5.61
20	− 6.67	− 6.61	− 6.56	− 6.50	− 6.44	− 6.39	− 6.33	− 6.28	− 6.22	− 6.17
19	− 7.22	− 7.17	− 7.11	− 7.06	− 7.00	− 6.94	− 6.89	− 6.83	− 6.78	− 6.72
18	− 7.78	− 7.72	− 7.67	− 7.61	− 7.55	− 7.50	− 7.44	− 7.39	− 7.33	− 7.28
17	− 8.33	− 8.28	− 8.22	− 8.17	− 8.11	− 8.06	− 8.00	− 7.94	− 7.89	− 7.83
16	− 8.89	− 8.83	− 8.78	− 8.72	− 8.67	− 8.61	− 8.55	− 8.50	− 8.44	− 8.39
15	− 9.44	− 9.39	− 9.33	− 9.28	− 9.22	− 9.17	− 9.11	− 9.06	− 9.00	− 8.94
14	−10.00	− 9.94	− 9.89	− 9.83	− 9.78	− 9.72	− 9.67	− 9.61	− 9.55	− 9.50
13	−10.55	−11.50	−10.44	−10.39	−10.33	−10.28	−10.22	−10.17	−10.11	−10.06
12	−11.11	−11.05	−11.00	−10.94	−10.89	−10.83	−10.78	−10.72	−10.67	−10.61
11	−11.67	−11.61	−11.55	−11.50	−11.44	−11.39	−11.33	−11.28	−11.22	−11.17
10	−12.22	−12.17	−12.11	−12.06	−12.00	−11.94	−11.89	−11.83	−11.78	−11.72
9	−12.78	−12.72	−12.67	−12.61	−12.55	−12.50	−12.44	−12.39	−12.33	−12.28
8	−13.33	−13.28	−13.22	−13.17	−13.11	−13.06	−13.00	−12.94	−12.89	−12.83
7	−13.89	−13.83	−13.78	−13.72	−13.67	−13.61	−13.55	−13.50	−13.44	−13.39
6	−14.44	−14.39	−14.33	−14.28	−14.22	−14.17	−14.11	−14.06	−14.00	−13.94
5	−15.00	−14.95	−14.89	−14.83	−14.78	−14.72	−14.67	−14.61	−14.55	−14.50
4	−15.56	−15.50	−15.44	−15.39	−15.33	−15.28	−15.22	−15.17	−15.11	−15.06
3	−16.11	−16.06	−16.00	−15.94	−15.89	−15.83	−15.78	−15.72	−15.67	−15.61
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**

Degrees of Fahrenheit.	Tenths of Degrees.									
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**
	Centig.	Centig.	Centig.	Centig.	Centig.	Centig.	Centig.	Centig.	Centig.	Centig.
+ 2	−16.67	−16.61	−16.55	−16.50	−16.44	−16.39	−16.33	−16.28	−16.22	−16.17
1	−17.22	−17.17	−17.11	−17.06	−17.00	−16.94	−16.89	−16.83	−16.78	−16.72
0	−17.78	−17.72	−17.67	−17.61	−17.55	−17.50	−17.44	−17.39	−17.33	−17.28
− 0	−17.78	−17.83	−17.89	−17.94	−18.00	−18.06	−18.11	−18.17	−18.22	−18.28
− 1	−18.33	−18.39	−18.44	−18.50	−18.55	−18.61	−18.66	−18.72	−18.78	−18.83
− 2	−18.89	−18.94	−19.00	−19.06	−19.11	−19.17	−19.22	−19.28	−19.33	−19.39
− 3	−19.44	−19.50	−19.55	−19.61	−19.67	−19.72	−19.78	−19.83	−19.89	−19.94
− 4	−20.00	−20.06	−20.11	−20.17	−20.22	−20.28	−20.33	−20.39	−20.44	−20.50
− 5	−20.56	−20.61	−20.67	−20.72	−20.78	−20.83	−20.89	−20.94	−21.00	−21.06
− 6	−21.11	−21.17	−21.22	−21.28	−21.33	−21.39	−21.44	−21.50	−21.56	−21.61
− 7	−21.67	−21.72	−21.78	−21.83	−21.89	−21.94	−22.00	−22.06	−22.11	−22.17
− 8	−22.22	−22.28	−22.33	−22.39	−22.44	−22.50	−22.56	−22.61	−22.67	−22.72
− 9	−22.78	−22.83	−22.89	−22.94	−23.00	−23.06	−23.11	−23.17	−23.22	−23.28
−10	−23.33	−23.39	−23.44	−23.50	−23.55	−23.61	−23.67	−23.72	−23.78	−23.83
−11	−23.89	−23.94	−24.00	−24.06	−24.11	−24.17	−24.22	−24.28	−24.33	−24.39
−12	−24.44	−24.50	−24.56	−24.61	−24.66	−24.72	−24.78	−24.83	−24.89	−24.94
−13	−25.00	−25.06	−25.11	−25.17	−25.22	−25.28	−25.33	−25.39	−25.44	−25.50
−14	−25.55	−25.61	−25.67	−25.72	−25.78	−25.83	−25.89	−25.94	−26.00	−26.06
−15	−26.11	−26.17	−26.22	−26.28	−26.33	−26.39	−26.44	−26.50	−26.55	−26.61
−16	−26.67	−26.72	−26.78	−26.83	−26.89	−26.94	−27.00	−27.06	−27.11	−27.17
−17	−27.22	−27.28	−27.33	−27.39	−27.44	−27.50	−27.55	−27.61	−27.67	−27.72
−18	−27.78	−27.83	−27.89	−27.94	−28.00	−28.06	−28.11	−28.17	−28.22	−28.28
−19	−28.33	−28.39	−28.44	−28.50	−28.55	−28.61	−28.67	−28.72	−28.78	−28.83
−20	−28.89	−28.94	−29.00	−29.06	−29.11	−29.17	−29.22	−29.28	−29.33	−29.39
−21	−29.44	−29.50	−29.55	−29.61	−29.67	−29.72	−29.78	−29.83	−29.89	−29.94
−22	−30.00	−30.06	−30.11	−30.17	−30.22	−30.28	−30.33	−30.39	−30.44	−30.50
−23	−30.55	−30.61	−30.66	−30.72	−30.78	−30.83	−30.89	−30.94	−31.00	−31.06
−24	−31.11	−31.17	−31.22	−31.28	−31.33	−31.39	−31.44	−31.50	−31.55	−31.61
−25	−31.67	−31.72	−31.78	−31.83	−31.89	−31.94	−32.00	−32.06	−32.11	−32.17
−26	−32.22	−32.28	−32.33	−32.39	−32.44	−32.50	−32.55	−32.61	−32.67	−32.72
−27	−32.78	−32.83	−32.89	−32.94	−33.00	−33.06	−33.11	−33.17	−33.22	−33.28
−28	−33.33	−33.39	−33.44	−33.50	−33.55	−33.61	−33.66	−33.72	−33.78	−33.83
−29	−33.89	−33.94	−34.00	−34.05	−34.11	−34.17	−34.22	−34.28	−34.33	−34.39
−30	−34.44	−34.50	−34.55	−34.61	−34.66	−34.72	−34.78	−34.83	−34.89	−34.94
−31	−35.00	−35.06	−35.11	−35.16	−35.22	−35.28	−35.33	−35.39	−35.44	−35.50
−32	−35.55	−35.61	−35.67	−35.72	−35.78	−35.83	−35.89	−35.94	−36.00	−36.06
−33	−36.11	−36.17	−36.22	−36.28	−36.33	−36.39	−36.44	−36.50	−36.56	−36.61
−34	−36.67	−36.72	−36.78	−36.83	−36.89	−36.94	−37.00	−37.06	−37.11	−37.17
−35	−37.22	−37.28	−37.33	−37.39	−37.44	−37.50	−37.55	−37.61	−37.67	−37.72
−36	−37.78	−37.83	−37.89	−37.94	−38.00	−38.06	−38.11	−38.17	−38.22	−38.28
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**

Degrees of Fahrenheit.	Tenths of Degrees.									
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**
	Centig.	Centig.	Centig.	Centig.	Centig.	Centig.	Centig.	Centig.	Centig.	Centig.
−37	−38.33	−38.39	−38.44	−38.50	−38.55	−38.61	−38.67	−38.72	−38.78	−38.83
−38	−38.89	−38.94	−39.00	−39.06	−39.11	−39.17	−39.22	−39.28	−39.33	−39.39
−39	−39.44	−39.50	−39.55	−39.61	−39.67	−39.72	−39.78	−39.83	−39.89	−39.94
−40	−40.00	−40.06	−40.11	−40.17	−40.22	−40.28	−40.33	−40.39	−40.44	−40.50
−41	−40.56	−40.61	−40.67	−40.72	−40.78	−40.83	−40.89	−40.94	−41.00	−41.06
−42	−41.11	−41.17	−41.22	−41.28	−41.33	−41.39	−41.44	−41.50	−41.55	−41.61
−43	−41.67	−41.72	−41.78	−41.83	−41.89	−41.94	−42.00	−42.05	−42.11	−42.16
−44	−42.22	−42.27	−42.33	−42.38	−42.44	−42.49	−42.55	−42.60	−42.66	−42.71
−45	−42.77	−42.82	−42.88	−42.93	−42.99	−43.04	−43.10	−43.15	−43.21	−43.26
−46	−43.33	−43.38	−43.44	−43.49	−43.55	−43.60	−43.66	−43.71	−43.77	−43.82
−47	−43.89	−43.93	−43.99	−44.04	−44.10	−44.15	−44.21	−44.26	−44.32	−44.37
−48	−44.44	−44.49	−44.55	−44.60	−44.66	−44.71	−44.77	−44.82	−44.88	−44.93
−49	−45.00	−45.05	−45.11	−45.16	−45.22	−45.27	−45.33	−45.38	−45.44	−45.49
−50	−45.56	−45.61	−45.67	−45.72	−45.78	−45.83	−45.89	−45.94	−46.00	−46.05
−51	−46.11	−46.16	−46.22	−46.27	−46.33	−46.38	−46.44	−46.49	−46.55	−46.61
−52	−46.67	−46.72	−46.78	−46.83	−46.89	−46.94	−47.00	−47.05	−47.11	−47.16
−53	−47.22	−47.27	−47.33	−47.38	−47.44	−47.49	−47.55	−47.60	−47.66	−47.72
−54	−47.78	−47.83	−47.89	−47.94	−48.00	−48.05	−48.11	−48.16	−48.22	−48.27
−55	−48.33	−48.38	−48.44	−48.49	−48.55	−48.60	−48.66	−48.72	−48.78	−48.83
−56	−48.88	−48.94	−48.99	−49.04	−49.10	−49.15	−49.21	−49.26	−49.32	−49.37
−57	−49.43	−49.48	−49.56	−49.61	−49.66	−49.71	−49.77	−49.82	−49.88	−49.93
−58	−49.99	−50.04	−50.11	−50.16	−50.22	−50.28	−50.33	−50.39	−50.44	−50.50
−59	−50.55	−50.61	−50.66	−50.72	−50.78	−50.83	−50.89	−50.94	−51.00	−51.06
−60	−51.11	−51.17	−51.22	−51.28	−51.33	−51.39	−51.44	−51.50	−51.55	−51.61
−61	−51.67	−51.72	−51.78	−51.83	−51.89	−51.94	−52.00	−52.06	−52.11	−52.17
−62	−52.22	−52.28	−52.33	−52.39	−52.44	−52.50	−52.56	−52.61	−52.67	−52.72
−63	−52.78	−52.83	−52.89	−52.94	−53.00	−53.06	−53.11	−53.17	−53.22	−53.28
−64	−53.33	−53.39	−53.44	−53.50	−53.56	−53.61	−53.67	−53.72	−53.78	−53.83
−65	−53.89	−53.94	−54.00	−54.06	−54.11	−54.17	−54.22	−54.28	−54.33	−54.39
−66	−54.44	−54.50	−54.55	−54.61	−54.67	−54.72	−54.78	−54.83	−54.89	−54.94
−67	−55.00	−55.06	−55.11	−55.17	−55.22	−55.28	−55.33	−55.39	−55.44	−55.50
−68	−55.55	−55.61	−55.67	−55.72	−55.78	−55.83	−55.89	−55.94	−56.00	−56.06
−69	−56.11	−56.17	−56.22	−56.28	−56.33	−56.39	−56.44	−56.50	−56.55	−56.61
−70	−56.67	−56.72	−56.78	−56.83	−56.89	−56.94	−57.00	−57.06	−57.11	−57.17
−71	−57.22	−57.28	−57.33	−57.39	−57.44	−57.50	−57.55	−57.61	−57.67	−57.72
−72	−57.78	−57.83	−57.89	−57.94	−58.00	−58.05	−58.11	−58.16	−58.22	−58.27
−73	−58.33	−58.38	−58.44	−58.49	−58.55	−58.60	−58.66	−58.72	−58.78	−58.83
−74	−58.89	−58.94	−58.99	−59.04	−59.10	−59.15	−59.21	−59.26	−59.33	−59.37
−75	−59.44	−59.50	−59.55	−59.61	−59.67	−59.72	−59.78	−59.83	−59.89	−59.94
−76	−60.00	−60.05	−60.11	−60.16	−60.22	−60.27	−60.33	−60.38	−60.44	−60.49
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**

Degrees of Fahrenheit.	Tenths of a Degree.									
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**
	Reaumur.	Reaumur.	Reaumur	Reaumur.	Reaumur	Reaumur.	Reaumur.	Reaumur.	Reaumur.	Reaumur.
+122	+40.00	+40.04	+40.09	+40.13	+40.18	+40.22	+40.27	+40.31	+40.35	+40.40
121	39.56	39.60	39.64	39.69	39.73	39.78	39.82	39.87	39.91	39.96
120	39.11	39.16	39.20	39.24	39.29	39.33	39.38	39.42	39.47	39.51
119	38.67	38.71	38.76	38.80	38.84	38.89	38.93	38.98	39.02	39.07
118	38.22	38.27	38.31	38.36	38.40	38.44	38.49	38.53	38.58	38.62
117	37.78	37 82	37.87	37.91	37.96	38.00	38.04	38.09	38.13	38.18
116	37.33	37.38	37.42	37.47	37.51	37.56	37.60	37.64	37.69	37.73
115	36.89	36.93	36.98	37.02	37.07	37.11	37.16	37.20	37.24	37.29
114	36.44	36.49	36.53	36.58	36.62	36.67	36.71	36.76	36.80	36.84
113	36.00	36.04	36.09	36.13	36.18	36.22	36.27	36.31	36.36	36.40
112	35.56	35.60	35.64	35.69	35.73	35.78	35.82	35.87	35.91	35.96
111	35.11	35.16	35.20	35.24	35.29	35.33	35.38	35.42	35.47	35.51
110	34.67	34.71	34.76	34.80	34.84	34.89	34.93	34.98	35.02	35.07
109	34.22	34.27	34.31	34.36	34.40	34.44	34.49	34.53	34.58	34.62
108	33.78	33.82	33.87	33.91	33.96	34.00	34.04	34.09	34.13	34.18
107	33.33	33.38	33.42	33.47	33.51	33.56	33.60	33 64	33.69	33.73
106	32.89	32.93	32.98	33.02	33.07	33.11	33.16	33.20	33.24	33.29
105	32.44	32.49	32.53	32.58	32.62	32.67	32.71	32.76	32.80	32.84
104	32.00	32.04	32.09	32.13	32 18	32.22	32.27	32.31	32.36	32.40
103	31.56	31.60	31.64	31.69	31.73	31.78	31.82	31.87	31.91	31.96
102	31.11	31.16	31.20	31.24	31.29	31.33	31.38	31.42	31.47	31.51
101	30.67	30.71	30.76	30.80	30.84	30.89	30.93	30.98	31.02	31.07
100	30.22	30.27	30.31	30.36	30.40	30.44	30.49	30.53	30.58	30.62
99	29.78	29.82	29.87	29.91	29.96	30.00	30.04	30.09	30.13	30.18
98	29.33	29.38	29.42	29.47	29.51	29.56	29.60	29.64	29.69	29.73
97	28.89	28.93	28.98	29.02	29.07	29.11	29.16	29.20	29.24	29.29
96	28.44	28.49	28.53	28.58	28.62	28.67	28.71	28.76	28.80	28.84
95	28.00	28.04	28.09	28.13	28.18	28.22	28.27	28.31	28.36	28.40
94	27.56	27.60	27.64	27.69	27.73	27.78	27.82	27.87	27.91	27.96
93	27.11	27.16	27.20	27.24	27.29	27.33	27.38	27.42	27.47	27.51
92	26.67	26.71	26.76	26.80	26.84	26.89	26.93	26.98	27.02	27.07
91	26.22	26.27	26.31	26.36	26.40	26.44	26.49	26.53	26.58	26.62
90	25.78	25.82	25.87	25.91	25.96	26.00	26.04	26.09	26.13	26.18
89	25.33	25.38	25.42	25.47	25.51	25.56	25.60	25.64	25.69	25.73
88	24.89	24.93	24.98	25.02	25.07	25.11	25.16	25.20	25.24	25.29
87	24.44	24.49	24.53	24.58	24.62	24.67	24.71	24.76	24 80	24.84
86	24.00	24.04	24.09	24.13	24 18	24.22	24.27	24 31	24.36	24.40
85	23.56	23.60	23.64	23.69	23.73	23.78	23.82	23.87	23 91	23.96
84	23.11	23.16	23.20	23.24	23.29	23 33	23.38	23.42	23.47	23.51
83	22.67	22.71	22.76	22.80	22.84	22.89	22.93	22.98	23.02	23.07
82	22.22	22.27	22.31	22.36	22.40	22.44	22.49	22.53	22.58	22.62
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**

Degrees of Fahrenheit.	Tenths of a Degree.									
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**
	Reaumur.	Reaumur.	Reaumur.	Reaumur.	Reaumur.	Reaumur.	Reaumur.	Reaumur.	Reaumur.	Reaumur.
+81	+21.78	+21.82	+21.87	+21.91	+21.96	+22.00	+22.04	+22.09	+22.13	+22.18
80	21.33	21.38	21.42	21.47	21.51	21.56	21.60	21.64	21.69	21.73
79	20.89	20.93	20.98	21.02	21.07	21.11	21.16	21.20	21.24	21.29
78	20.44	20.49	20.53	20.58	20.62	20.67	20.71	20.76	20.80	20.84
77	20.00	20.04	20.09	20.13	20.18	20.22	20.27	20.31	20.36	20.40
76	19.56	19.60	19.64	19.69	19.73	19.78	19.82	19.87	19.91	19.96
75	19.11	19.16	19.20	19.24	19.29	19.33	19.38	19.42	19.47	19.51
74	18.67	18.71	18.76	18.80	18 84	18.89	18.93	18.98	19.02	19.07
73	18.22	18.27	18.31	18.36	18.40	18.44	18.49	18.53	18.58	18.62
72	17.78	17.82	17.87	17.91	17.96	18.00	18.04	18.09	18.13	18.18
71	17.33	17.38	17.42	17.47	17.51	17.56	17.60	17.64	17.69	17.73
70	16.89	16.93	16.98	17.02	17.07	17.11	17.16	17.20	17.24	17.29
69	16.44	16.49	16.53	16.58	16.62	16.67	16.71	16.76	16.80	16.84
68	16.00	16.04	16.09	16.13	16.18	16.22	16.27	16.31	16.36	16.40
67	15.56	15.60	15.64	15.69	15.73	15.78	15.82	15.87	15.91	15.96
66	15.11	15.16	15.20	15.24	15.29	15.33	15.38	15.42	15.47	15.51
65	14.67	14.71	14.76	14.80	14.84	14.89	14.93	14.98	15.02	15.07
64	14.22	14.27	14.31	14.36	14.40	14.44	14.49	14.53	14.58	14.62
63	13.78	13.82	13.87	13.91	13 96	14.00	14.04	14.09	14.13	14.18
62	13.33	13.38	13.42	13.47	13.51	13.56	13.60	13.64	13.69	13.73
61	12.89	12.93	12.98	13.02	13.07	13.11	13.16	13.20	13.24	13.29
60	12.44	12.49	12.53	12.58	12.62	12.67	12.71	12.76	12.80	12.84
59	12.00	12.04	12.09	12.13	12.18	12.22	12.27	12.31	12.36	12.40
58	11.56	11.60	11.64	11.69	11.73	11.78	11.82	11.87	11.91	11.96
57	11.11	11.16	11.20	11.24	11.29	11.33	11.38	11.42	11.47	11.51
56	10.67	10.71	10.76	10.80	10.84	10.89	10.93	10.98	11.02	11.07
55	10.22	10.27	10.31	10.36	10.40	10.44	10.49	10.53	10.58	10.62
54	9.78	9.82	9.87	9.91	9.96	10.00	10.04	10.09	10.13	10.18
53	9.33	9.38	9.42	9.47	9.51	9.56	9.60	9.64	9.69	9.73
52	8.89	8.93	8.98	9.02	9.07	9.11	9.16	9.20	9.24	9.29
51	8.44	8.49	8.53	8.58	8.62	8.67	8.71	8.76	8.80	8.84
50	8.00	8.04	8.09	8.13	8.18	8.22	8.27	8.31	8.36	8.40
49	7.56	7.60	7.64	7.69	7.73	7.78	7.82	7.87	7.91	7.96
48	7.11	7.16	7.20	7.24	7.29	7.33	7.38	7.42	7.47	7.51
47	6.67	6.71	6.76	6.80	6.84	6.89	6.93	6.98	7.02	7.07
46	6.22	6.27	6.31	6.36	6.40	6.44	6.49	6.53	6.58	6.62
45	5.78	5.82	5.87	5.91	5.96	6.00	6.04	6.09	6.13	6.18
44	5 33	5.38	5.42	5.47	5.51	5.56	5.60	5.64	5.69	5.73
43	4.89	4.93	4.98	5.02	5.07	5.11	5.16	5.20	5.24	5.29
42	4.44	4.49	4.53	4.58	4.62	4.67	4.71	4.76	4.80	4.84
41	4.00	4.04	4.09	4.13	4.18	4.22	4.27	4.31	4.36	4.40
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**

Degrees of Fahrenheit.	Tenths of a Degree.									
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**
	Reaumur	Reaumur.	Reaumur.	Reaumur.	Reaumur.	Reaumur.	Reaumur.	Reaumur.	Reaumur.	Reaumur.
+40	+ 3.56	+ 3.60	+ 3.64	+ 3.69	+ 3.73	+ 3.78	+ 3.82	+ 3.87	+ 3.91	+ 3.96
39	3.11	3.16	3.20	3.24	3.29	3.33	3.38	3.42	3.47	3.51
38	2.67	2.71	2.76	2.80	2.84	2.89	2.93	2.98	3.02	3.07
37	2.22	2.27	2.31	2.36	2.40	2.44	2.49	2.53	2.58	2.62
36	1.78	1.82	1.87	1.91	1.96	2.00	2.04	2.09	2.13	2.18
35	1.33	1.38	1.42	1.47	1.51	1.56	1.60	1.64	1.69	1.73
34	0.89	0.93	0.98	1.02	1.07	1.11	1.16	1.20	1.24	1.29
33	0.44	0.49	0.53	0.58	0.62	0.67	0.71	0.76	0.80	0.84
32	0.00	0.04	0.09	0.13	0.18	0.22	0.27	0.31	0.36	0.40
31	− 0.44	− 0.40	− 0.36	− 0.31	− 0.27	− 0.22	− 0.18	− 0.13	− 0.09	− 0.04
30	− 0.89	− 0.84	− 0.80	− 0.76	− 0.71	− 0.67	− 0.62	− 0.58	− 0.53	− 0.49
29	− 1.33	− 1.29	− 1.24	− 1.20	− 1.16	− 1.11	− 1.07	− 1.02	− 0.98	− 0.93
28	− 1.78	− 1.73	− 1.69	− 1.64	− 1.60	− 1.56	− 1.51	− 1.47	− 1.42	− 1.38
27	− 2.22	− 2.18	− 2.13	− 2.09	− 2.04	− 2.00	− 1.96	− 1.91	− 1.87	− 1.82
26	− 2.67	− 2.62	− 2.58	− 2.53	− 2.49	− 2.44	− 2.40	− 2.36	− 2.31	− 2.27
25	− 3.11	− 3.07	− 3.02	− 2.98	− 2.93	− 2.89	− 2.84	− 2.80	− 2.76	− 2.71
24	− 3.56	− 3.51	− 3.47	− 3.42	− 3.38	− 3.33	− 3.29	− 3.24	− 3.20	− 3.16
23	− 4.00	− 3.96	− 3.91	− 3.87	− 3.82	− 3.78	− 3.73	− 3.69	− 3.64	− 3.60
22	− 4.44	− 4.40	− 4.36	− 4.31	− 4.27	− 4.22	− 4.18	− 4.13	− 4.09	− 4.04
21	− 4.89	− 4.84	− 4.80	− 4.76	− 4.71	− 4.67	− 4.62	− 4.58	− 4.53	− 4.49
20	− 5.33	− 5.29	− 5 24	− 5.20	− 5.16	− 5.11	− 5.07	− 5.02	− 4.98	− 4.93
19	− 5.78	− 5.73	− 5.69	− 5.64	− 5.60	− 5.56	− 5.51	− 5.47	− 5.42	− 5.38
18	− 6.22	− 6.18	− 6.13	− 6.09	− 6.04	− 6.00	− 5.96	− 5.91	− 5.87	− 5.82
17	− 6.67	− 6.62	− 6.58	− 6.53	− 6.49	− 6.44	− 6.40	− 6.36	− 6.31	− 6.27
16	− 7.11	− 7.07	− 7.02	− 6.98	− 6.93	− 6.89	− 6.84	− 6.80	− 6.76	− 6.71
15	− 7.56	− 7.51	− 7.47	− 7.42	− 7.38	− 7.33	− 7.29	− 7.24	− 7.20	− 7.16
14	− 8.00	− 7.96	− 7.91	− 7.87	− 7.82	− 7.78	− 7.73	− 7.69	− 7.64	− 7.60
13	− 8.44	− 8.40	− 8.36	− 8.31	− 8.27	− 8.22	− 8.18	− 8.13	− 8.09	− 8.04
12	− 8.89	− 8.84	− 8.80	− 8.76	− 8.71	− 8.67	− 8.62	− 8.58	− 8.53	− 8.49
11	− 9.33	− 9.29	− 9.24	− 9.20	− 9.16	− 9.11	− 9.07	− 9.02	− 8.98	− 8.93
10	− 9.78	− 9.73	− 9.69	− 9.64	− 9.60	− 9.56	− 9.51	− 9.47	− 9.42	− 9.38
9	−10.22	−10.18	−10.13	−10.09	−10.04	−10.00	− 9.96	− 9.91	− 9.87	− 9.82
8	−10.67	−10.62	−10.58	−10.53	−10.49	−10.44	−10.40	−10.36	−10.31	−10.27
7	−11.11	−11.07	−11.02	−10.98	−10.93	−10.89	−10.84	−10.80	−10.76	−10.71
6	−11.56	−11.51	−11.47	−11.42	−11.38	−11.33	−11.29	−11.24	−11.20	−11.16
5	−12.00	−11.96	−11.91	−11.87	−11.82	−11.78	−11.73	−11.69	−11.64	−11.60
4	−12.44	−12.40	−12.36	−12.31	−12.27	−12.22	−12.18	−12.13	−12.09	−12.04
3	−12.89	−12.84	−12.80	−12.76	−12.71	−12.67	−12.62	−12.58	−12.53	−12.49
2	−13.33	−13.29	−13.24	−13.20	−13.16	−13.11	−13.07	−12.02	−12.98	−12.93
1	−13.78	−13.73	−13.69	−13.64	−13.60	−13.56	−13.51	−13.47	−13.42	−13.38
+ 0	−14.22	−14.18	−14.13	−14.09	−14.04	−14.00	−13.96	−13.91	−13.87	−13.82
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**

Degrees of Fahrenheit.	Tenths of a Degree.									
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**
	Reaumur.	Reaumur.	Reaumur.	Reaumur.	Reaumur	Reaumur.	Reaumur.	Reaumur.	Reaumur.	Reaumur.
− 0	−14.22	−14.27	−14.31	−14.36	−14.40	−14.44	−14.49	−14.53	−14.58	−14.62
− 1	−14.67	−14.71	−14.76	−14.80	−14.84	−14.89	−14.93	−14.98	−15.02	−15.07
− 2	−15.11	−15.16	−15.20	−15.24	−15.29	−15 33	−15.38	−15.42	−15.47	−15.51
− 3	−15.56	−15.60	−15.64	−15.69	−15.73	−15.78	−15.82	−15 87	−15.91	−15.96
− 4	−16.00	−16.04	−16.09	−16.13	−16.18	−16.22	−16.27	−16.31	−16.36	−16.40
− 5	−16.44	−16.49	−16.53	−16.58	−16.62	−16.67	−16.71	−16.76	−16.80	−16.84
− 6	−16.89	−17.93	−16.98	−17.02	−17.07	−17.11	−17.16	−17.20	−17.24	−17.29
− 7	−17.33	−17.38	−17.42	−17.47	−17.51	−17.56	−17.60	−17.64	−17.69	−17.73
− 8	−17.78	−18.82	−17.87	−17.91	−17.96	−18.00	−18.04	−18.09	−18.13	−18.18
− 9	−18.22	−18.27	−18.31	−18.36	−18.40	−18.44	−18.49	−18.53	−18.58	−18.62
−10	−18.67	−18.71	−18.76	−18.80	−18.84	−18.89	−18.93	−18.98	−19.02	−19.07
−11	−19.11	−19.16	−19.20	−19.24	−19.29	−19.33	−19.38	−19.42	−19.47	−19.51
−12	−19 56	−19.60	−19.64	−19.69	−19.73	−19.78	−19.82	−19.87	−19.91	−19.96
−13	−20.00	−20.04	−20.09	−20.13	−20.18	−20.22	−20.27	−20.31	−20.36	−20.40
−14	−20.44	−20.49	−20.53	−20.58	−20.62	−20.67	−20.71	−20.76	−20.80	−20.84
−15	−20.89	−20.93	−20.98	−21.02	−21.07	−21.11	−21.16	−21.20	−21.24	−21.29
−16	−21.33	−21.38	−21.42	−21.47	−21.51	−21.56	−21.60	−21.64	−21.69	−21.73
−17	−21.78	−21.82	−21.87	−21.91	−21.96	−22.00	−22.04	−22.09	−22.13	−22.18
−18	−22.22	−22.27	−22.31	−22.36	−22.40	−22.44	−22.49	−22.53	−22.58	−22.62
−19	−22.67	−22.71	−22.76	−22.80	−22.84	−22.89	−22.93	−22.98	−23.02	−23.07
−20	−23.11	−23.16	−23.20	−23.24	−23.29	−23.33	−23.38	−23.42	−23.47	−23 51
−21	−23.56	−23.60	−23.64	−23.69	−23.73	−23.78	−23.82	−23.87	−23.91	−23.96
−22	−24.00	−24.04	−24.09	−24.13	−24.18	−24.22	−24.27	−24.31	−24.36	−24.40
−23	−24.44	−24.49	−24.53	−24.58	−24.62	−24.67	−24.71	−24.76	−24.80	−24.84
−24	−24.89	−24.93	−24.98	−25.02	−25.07	−25.11	−25.16	−25.20	−25.24	−25.29
−25	−25.33	−25.38	−25.42	−25.47	−25.51	−25.56	−25.60	−25.64	−25.69	−25.73
−26	−25.78	−25.82	−25.87	−25.91	−25.96	−26.00	−26.04	−26.09	−26.13	−26.18
−27	−26.22	−26.27	−26.31	−26.36	−26.40	−26.44	−26.49	−26.53	−26.58	−26.62
−28	−26.67	−26.71	−26.76	−26.80	−26.84	−26.89	−26.93	−26.98	−27 02	−27.07
−29	−27.11	−27.16	−27.20	−27.24	−27.29	−27.33	−27.38	−27.42	−27.47	−27.51
−30	−27.56	−27.60	−27.64	−27.69	−27.73	−27.78	−27.82	−27.87	−27.91	−27.96
−31	−28.00	−28.04	−28.09	−28.13	−28.18	−28.22	−28.27	−28.31	−28.36	−28.40
−32	−28 44	−28.49	−28.53	−28.58	−28.62	−28.67	−28.71	−28.76	−28.80	−28·84
−33	−28.89	−28.93	−28.98	−29.02	−29.07	−29.11	−29.16	−29.20	−29.24	−29.29
−34	−29.33	−29.38	−29.42	−29.47	−29.51	−29.56	−29.60	−29.64	−29.69	−29·73
−35	−29.78	−29.82	−29.87	−29.91	−29.96	−30.00	−30.04	−30.09	−30.13	−30·18
−36	−30.22	−30.27	−30.31	−30.36	−30.40	−30.44	−30.49	−30.53	−30.58	−30.62
−37	−30.67	−30.71	−30.76	−30.80	−30.84	−30.89	−30.93	−30·98	−31.02	−31.07
−38	−31.11	−31.16	−31.20	−31.24	−31.29	−31.33	−31.38	−31·42	−31.47	−31·51
−39	−31.56	−31.60	−31.64	−31.69	−31.73	−31.78	−31.82	−31·87	−31.91	−31.96
−40	−32.00	−30.04	−30.09	−30.13	−30.18	−30.22	−30.27	−30.31	−30.35	−30·40
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**·8.**	**9.**

Centigrade Degrees.	Tenths of Degrees.									
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**
	Fahren.	Fahren.	Fahren.	Fahren.	Fahren.	Fahren.	Fahren.	Fahren.	Fahren.	Fahren.
+50	+122.00	+122.18	+122.36	+122.54	+122.72	+122.90	+123.08	+123.26	+123.44	+123.62
49	120.20	120.38	120.56	120.74	120.92	121.10	121.28	121.46	121.64	121.82
48	118.40	118.58	118.76	118.94	119.12	119.30	119.48	119.66	119.84	120.02
47	116.60	116.78	116.96	117.14	117.32	117.50	117.68	117.86	118.04	118.22
46	114.80	114.98	115.16	115.34	115.52	115.70	115.88	116.06	116.24	116.42
45	113.00	113.18	113.36	113.54	113.72	113.90	114.08	114.26	114.44	114.62
44	111.20	111.38	111.56	111.74	111.92	112.10	112.28	112.46	112.64	112.82
43	109.40	109.58	109.76	109.94	110.12	110.30	110.48	110.66	110.84	111.02
42	107.60	107.78	107.96	108.14	108.32	108.50	108.68	108.86	109.04	109.22
41	105.80	105.98	106.16	106.34	106.52	106.70	106.88	107.06	107.24	107.42
40	104.00	104.18	104.36	104.54	104.72	104.90	105.08	105.26	105.44	105.62
39	102.20	102.38	102.56	102.74	102.92	103.10	103.28	103.46	103.64	103.82
38	100.40	100.58	100.76	100.94	101.12	101.30	101.48	101.66	101.84	102.02
37	98.60	98.78	98.96	99.14	99.32	99.50	99.68	99.86	100.04	100.22
36	96.80	96.98	97.16	97.34	97.52	97.70	97.88	98.06	98.24	98.42
35	95.00	95.18	95.36	95.54	95.72	95.90	96.08	96.26	96.44	96.62
34	93.20	93.38	93.56	93.74	93.92	94.10	94.28	94.46	94.64	94.82
33	91.40	91.58	91.76	91.94	92.12	92.30	92.48	92.66	92.84	93.02
32	89.60	89.78	89.96	90.14	90.32	90.50	90.68	90.86	91.04	91.22
31	87.80	87.98	88.16	88.34	88.52	88.70	88.88	89.06	89.24	89.42
30	86.00	86.18	86.36	86.54	86.72	86.90	87.08	87.26	87.44	87.62
29	84.20	84.38	84.56	84.74	84.92	85.10	85.28	85.46	85.64	85.82
28	82.40	82.58	82.76	82.94	83.12	83.30	83.48	83.66	83.84	84.02
27	80.60	80.78	80.96	81.14	81.32	81.50	81.68	81.86	82.04	82.22
26	78.80	78.98	79.16	79.34	79.52	79.70	79.88	80.06	80.24	80.42
25	77.00	77.18	77.36	77.54	77.72	77.90	78.08	78.26	78.44	78.62
24	75.20	75.38	75.56	75.74	75.92	76.10	76.28	76.46	76.64	76.82
23	73.40	73.58	73.76	73.94	74.12	74.30	74.48	74.66	74.84	75.02
22	71.60	71.78	71.96	72.14	72.32	72.50	72.68	72.86	73.04	73.22
21	69.80	69.98	70.16	70.34	70.52	70.70	70.88	71.06	71.24	71.42
20	68.00	68.18	68.36	68.54	68.72	68.90	69.08	69.26	69.44	69.62
19	66.20	66.38	66.56	66.74	66.92	67.10	67.28	67.46	67.64	67.82
18	64.40	64.58	64.76	64.94	65.12	65.30	65.48	65.66	65.84	66.02
17	62.60	62.78	62.96	63.14	63.32	63.50	63.68	63.86	64.04	64.22
16	60.80	60.98	61.16	61.34	61.52	61.70	61.88	62.06	62.24	62.42
15	59.00	59.18	59.36	59.54	59.72	59.90	60.08	60.26	60.44	60.62
14	57.20	57.38	57.56	57.74	57.92	58.10	58.28	58.46	58.64	58.82
13	55.40	55.58	55.76	55.94	56.12	56.30	56.48	56.66	56.84	57.02
12	53.60	53.78	53.96	54.14	54.32	54.50	54.68	54.86	55.04	55.22
11	51.80	51.98	52.16	52.34	52.52	52.70	52.88	53.06	53.24	53.42
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**

Centigrade Degrees.	Tenths of Degrees.									
	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.
	Fahren.	Fahren.	Fahren.	Fahren.	Fahren.	Fahren.	Fahren.	Fahren.	Fahren.	Fahren.
+10	+50.00	+50.18	+50.36	+50.54	+50.72	+50.90	+51.08	+51.26	+51.44	+51.62
9	48.20	48.38	48.56	48.74	48.92	49.10	49.28	49.46	49.64	49.82
8	46.40	46 58	46.76	46.94	47.12	47.30	47.48	47.66	47.84	48.02
7	44.60	44.78	44.96	45.14	45.32	45.50	45.68	45.86	46.04	46.22
6	42.80	42.98	43.16	43.34	43.52	43.70	43.88	44.06	44.24	44.42
5	41.00	41.18	41.36	41.54	41.72	41.90	42.08	42.26	42.44	42.62
4	39.20	39.38	39.56	39.74	39.92	40.10	40.28	40.46	40.64	40.82
3	37.40	37.58	37.76	37.94	38.12	38.30	38.48	38.66	38.84	39.02
2	35.60	35.78	35.96	36.14	36.32	36.50	36.68	36.86	37.04	37.22
1	33.80	33.98	34.16	34.34	34.52	34.70	34.88	35.06	35.24	35.42
0	32.00	32.18	32.36	32.54	32.72	32.90	33.08	33.26	33.44	33.62
− 0	32.00	31.82	31.64	31.46	31.28	31.10	30.92	30.74	30.56	30.38
− 1	30.20	30.02	29.84	29.66	29.48	29.30	29.12	28.94	28.76	28.58
− 2	28.40	28.22	28.04	27.86	27.68	27.50	27.32	27.14	26.96	26.78
− 3	26.60	26.42	26.24	26.06	25.88	25.70	25.52	25.34	25.16	24.98
− 4	24.80	24.62	24.44	24.26	24.08	23.90	23.72	23.54	23.36	23.18
− 5	23.00	22.82	22.64	22.46	22.28	22.10	21.92	21.74	21.56	21.38
− 6	21.20	21.02	20.84	20.66	20.48	20.30	20.12	19.94	19.76	19.58
− 7	19.40	19.22	19.04	18.86	18.68	18.50	18.32	18.14	17.96	17.78
− 8	17.60	17.42	17.24	17.06	16.88	16.70	16.52	16.34	16.16	15.98
− 9	15.80	15.62	15.44	15.26	15.08	14.90	14.72	14.54	14.36	14.18
−10	14.00	13.82	13.64	13.46	13.28	13.10	12.92	12.74	12.56	12.38
−11	12.20	12.02	11.84	11.66	11.48	11.30	11.12	10.94	10.76	10.58
−12	10.40	10.22	10.04	9.86	9.68	9.50	9.32	9.14	8.96	8.78
−13	8.60	8.42	8.24	8.06	7.88	7.70	7.52	7.34	7.16	6.98
−14	6.80	6.62	6.44	6.26	6.08	5.90	5.72	5.54	5.36	5.18
−15	5.00	4.82	4.64	4.46	4.28	4.10	3.92	3.74	3.56	3.38
−16	3.20	3.02	2.84	2.66	2.48	2.30	2.12	1.94	1.76	1.58
−17	1.40	1.22	1.04	0.86	0.68	0.50	0.32	0.14	− 0.04	− 0.22
−18	− 0.40	− 0.58	− 0.76	− 0.94	− 1.12	− 1.30	− 1.48	− 1.66	− 1.84	− 2.02
−19	− 2.20	− 2.38	− 2.56	− 2.74	− 2.92	− 3.10	− 3.28	− 3.46	− 3.64	− 3.82
−20	− 4.00	− 4.18	− 4.36	− 4.54	− 4.72	− 4.90	− 5.08	− 5.26	− 5.44	− 5.62
−21	− 5.80	− 5.98	− 6.16	− 6.34	− 6.52	− 6.70	− 6.88	− 7.06	− 7.24	− 7.42
−22	− 7.60	− 7.78	− 7.96	− 8.14	− 8.32	− 8.50	− 8.68	− 8.86	− 9.04	− 9.22
−23	− 9.40	− 9.58	− 9.76	− 9.94	−10.12	−10.30	−10.48	−10.66	−10.84	−11.02
−24	−11.20	−11.38	−11.56	−11.74	−11.92	−12.10	−12.28	−12.46	−12.64	−12.82
−25	−13.00	−13.18	−13.36	−13.54	−13.72	−13.90	−14.08	−14.26	−14.44	−14.62
−26	−14.80	−14.98	−15.16	−15.34	−15.52	−15.70	−15.88	−16.06	−16.24	−16.42
−27	−16.60	−16.78	−16.96	−17.14	−17.32	−17.50	−17.68	−17.86	−18.04	−18.22
−28	−18.40	−18.58	−18.76	−18.94	−19.12	−19.30	−19.48	−19.66	−19.84	−20.02
−29	−20.20	−20.38	−20.56	−20.74	−20.92	−21.10	−21.28	−21.46	−21.64	−21.82
	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.

Centigrade Degrees.	Tenths of Degrees.									
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**
	Fahren.	Fahren.	Fahren.	Fahren.	Fahren.	Fahren.	Fahren.	Fahren.	Fahren.	Fahren.
−30	−22.00	−22.18	−22.36	−22.54	−22.72	−22.90	−23.08	−23.26	−23.44	−23.62
−31	−23.80	−23.98	−24.16	−24.34	−24.52	−24.70	−24.88	−25.06	−25.24	−25.42
−32	−25.60	−25.78	−25.96	−26.14	−26.32	−26.50	−26.68	−26.86	−27.04	−27.22
−33	−27.40	−27.58	−27.76	−27.94	−28.12	−28.30	−28.48	−28.66	−28.84	−29.02
−34	−29.20	−29.38	−29.56	−29.74	−29.92	−30.10	−30.28	−30.46	−30.64	−30.82
−35	−31.00	−31.18	−31.36	−31.54	−31.72	−31.90	−32.08	−32.26	−32.44	−32.62
−36	−32.80	−32.98	−33.16	−33.34	−33.52	−33.70	−33.88	−34.06	−34.24	−34.42
−37	−34.60	−34.78	−34.96	−35.14	−35.32	−35.50	−35.68	−35.86	−36.04	−36.22
−38	−36.40	−36.58	−36.76	−36.94	−37.12	−37.30	−37.48	−37.66	−37.84	−38.02
−39	−38.20	−38.38	−38.56	−38.74	−38.92	−39.10	−39.28	−39.46	−39.64	−39.82
−40	−40.00	−40.18	−40.36	−40.54	−40.72	−40.90	−41.08	−41.26	−41.44	−41.62
−41	−41.80	−41.98	−42.16	−42.34	−42.52	−42.70	−42.88	−43.06	−43.24	−43.42
−42	−43.60	−43.78	−43.96	−44.14	−44.32	−44.50	−44.68	−44.86	−45.04	−45.22
−43	−45.40	−45.58	−45.76	−45.94	−46.12	−46.30	−46.48	−46.66	−46.84	−47.02
−44	−47.20	−47.38	−47.56	−47.74	−47.92	−48.10	−48.28	−48.46	−48.64	−48.82
−45	−49.00	−49.18	−49.36	−49.54	−49.72	−49.90	−50.08	−50.26	−50.44	−50.62
−46	−50.80	−50.98	−51.16	−51.34	−51.52	−51.70	−51.88	−52.06	−52.24	−52.42
−47	−52.60	−52.78	−52.96	−53.14	−53.32	−53.50	−53.68	−53.86	−54.04	−54.22
−48	−54.40	−54.58	−54.76	−54.94	−55.12	−55.30	−55.48	−55.66	−55.84	−56.02
−49	−56.20	−56.38	−56.56	−56.74	−56.92	−57.10	−57.28	−57.46	−57.64	−57.82
−50	−58.00	−58.18	−58.36	−58.54	−58.72	−58.90	−59.08	−59.26	−59.44	−59.62
−51	−59.80	−59.98	−60.16	−60.34	−60.52	−60.70	−60.88	−61.06	−61.24	−61.42
−52	−61.60	−61.78	−61.96	−62.14	−62.32	−62.50	−62.68	−62.86	−63.04	−63.22
−53	−63.40	−63.58	−63.76	−63.94	−64.12	−64.30	−64.48	−64.66	−64.84	−65.02
−54	−65.20	−65.38	−65.56	−65.74	−65.92	−66.10	−66.28	−66.46	−66.64	−66.82

TABLE FOR COMPARING THE CENTIGRADE AND FAHRENHEIT'S THERMOMETERS NEAR THE BOILING POINT.

Centigrade Degrees.	**0.**	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**
	Fahren.	Fahren.	Fahren.	Fahren.	Fahren.	Fahren.	Fahren.	Fahren.	Fahren.	Fahren.
100	212.00	212.18	212.36	212.54	212.72	212.90	213.08	213.26	213.44	213.62
99	210.20	210.38	210.56	210.74	210.92	211.10	211.28	211.46	211.64	211.82
98	208.40	208.58	208.76	208.94	209.12	209.30	209.48	209.66	209.84	210.02
97	206.60	206.78	206.96	207.14	207.32	207.50	207.68	207.86	208.04	208.22
96	204.80	204.98	205.16	205.34	205.52	205.70	205.88	206.06	206.24	206.42
95	203.00	203.18	203.36	203.54	203.72	203.90	204.08	204.26	204.44	204.62
94	201.20	201.38	201.56	201.74	201.92	202.10	202.28	202.46	202.64	202.82
93	199.40	199.58	199.76	199.94	200.12	200.30	200.48	200.66	200.84	201.02
92	197.60	197.78	197.96	198.14	198.32	198.50	198.68	198.86	199.04	199.22
91	195.80	195.98	196.16	196.34	196.52	196.70	196.88	197.06	197.24	197.42
90	194.00	194.18	194.36	194.54	194.72	194.90	195.08	195.26	195.44	195.62
89	192.20	192.38	192.56	192.74	192.92	193.10	193.28	193.46	193.64	193.82

Centigrade Degrees.	Tenths of Degrees.									
	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.
	Reaum.	Reaum.	Reaum.	Reaum.	Reaum.	Reaum.	Reaum.	Reaum.	Reaum.	Reaum.
+40	+32.00	+32.08	+32.16	+32.24	+32.32	+32.40	+32.48	+32.56	+32.64	+32.72
39	31.20	31.28	31.36	31.44	31.52	31.60	31.68	31.76	31.84	31.92
38	30.40	30.48	30.56	30.64	30.72	30.80	30.88	30.96	31.04	31.12
37	29.60	29.68	29.76	29.84	29.92	30.00	30.08	30.16	30.24	30.32
36	28.80	28.88	28.96	29.04	29.12	29.20	29.28	29.36	29.44	29.52
35	28.00	28.08	28.16	28.24	28.32	28.40	28.48	28.56	28.64	28.72
34	27.20	27.28	27.36	27.44	27.52	27.60	27.68	27.76	27.84	27.92
33	26.40	26.48	26.56	26.64	26.72	26.80	26.88	26.96	27.04	27.12
32	25.60	25.68	25.76	25.84	25.92	26.00	26.08	26.16	26.24	26.32
31	24.80	24.88	24.96	25.04	25.12	25.20	25.28	25.36	25.44	25.52
30	24.00	24.08	24.16	24.24	25.32	24.40	24.48	24.56	24.64	24.72
29	23.20	23.28	23.36	23.44	23.52	23.60	23.68	23.76	23.84	23.92
28	22.40	22.48	22.56	22.64	22.72	22.80	22.88	22.96	23.04	23.12
27	21.60	21.68	21.76	21.84	21.92	22.00	22.08	22.16	22.24	22.32
26	20.80	20.88	20.96	21.04	21.12	21.20	21.28	21.36	21.44	21.52
25	20.00	20.08	20.16	20.24	20.32	20.40	20.48	20.56	20.64	20.72
24	19.20	19.28	19.36	19.44	19.52	19.60	19.68	19.76	19.84	19.92
23	18.40	18.48	18.56	18.64	18.72	18.80	18.88	18.96	19.04	19.12
22	17.60	17.68	17.76	17.84	17.92	18.00	18.08	18.16	18.24	18.32
21	16.80	16.88	16.96	17.04	17.12	17.20	17.28	17.36	17.44	17.52
20	16.00	16.08	16.16	16.24	16.32	16.40	16.48	16.56	16.64	16.72
19	15.20	15.28	15.36	15.44	15.52	15.60	15.68	15.76	15.84	15.92
18	14.40	14.48	14.56	14.64	14.72	14.80	14.88	14.96	15.04	15.12
17	13.60	13.68	13.76	13.84	13.92	14.00	14.08	14.16	14.24	14.32
16	12.80	12.88	12.96	13.04	13.12	13.20	13.28	13.36	13.44	13.52
15	12.00	12.08	12.16	12.24	12.32	12.40	12.48	12.56	12.64	12.72
14	11.20	11.28	11.36	11.44	11.52	11.60	11.68	11.76	11.84	11.92
13	10.40	10.48	10.56	10.64	10.72	10.80	10.88	10.96	11.04	11.12
12	9.60	9.68	9.76	9.84	9.92	10.00	10.08	10.16	10.24	10.32
11	8.80	8.88	8.96	9.04	9.12	9.20	9.28	9.36	9.44	9.52
10	8.00	8.08	8.16	8.24	8.32	8.40	8.48	8.56	8.64	8.72
9	7.20	7.28	7.36	7.44	7.52	7.60	7.68	7.76	7.84	7.92
8	6.40	6.48	6.56	6.64	6.72	6.80	6.88	6.96	7.04	7.12
7	5.60	5.68	5.76	5.84	5.92	6.00	6.08	6.16	6.24	6.32
6	4.80	4.88	4.96	5.04	5.12	5.20	5.28	5.36	5.44	5.52
5	4.00	4.08	4.16	4.24	4.32	4.40	4.48	4.56	4.64	4.72
4	3.20	3.28	3.36	3.44	3.52	3.60	3.68	3.76	3.84	3.92
3	2.40	2.48	2.56	2.64	2.72	2.80	2.88	2.96	3.04	3.12
2	1.60	1.68	1.76	1.84	1.92	2.00	2.08	2.16	2.24	2.32
1	0.80	0.88	0.96	1.04	1.12	1.20	1.28	1.36	1.44	1.52
○	○	○	○	○	○	○	○	○	○	○
0	0.00	0.08	0.16	0.24	0.32	0.40	0.48	0.56	0.64	0.72
	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.

Degrees of Réaumur.	Tenths of Degrees.									
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**
	Fahren.	Fahren.	Fahren.	Fahren.	Fahren.	Fahren.	Fahren.	Fahren.	Fahren.	Fahren
+40	+122.00	+122.22	+122.45	+122.67	+122.90	+123.12	+123.35	+123.57	+123.80	+124.02
39	119.75	119.97	120.20	120.42	120.65	120.87	121.10	121.32	121.55	121.77
38	117.50	117.72	117.95	118.17	118.40	118.62	118.85	119.07	119.30	119.52
37	115.25	115.47	115.70	115.92	116.15	116.37	116.60	116.82	117.05	117.27
36	113.00	113.22	113.45	113.67	113.90	114.12	114.35	114.57	114.80	115.02
35	110.75	110.97	111.20	111.42	111.65	111.87	112.10	112.32	112.55	112.77
34	108.50	108.72	108.95	109.17	109.40	109.62	109.85	110.07	110.30	110.52
33	106.25	106.47	106.70	106.92	107.15	107.37	107.60	107.82	108.05	108.27
32	104.00	104.22	104.45	104.67	104.90	105.12	105.35	105.57	105.80	106.02
31	101.75	101.97	102.20	102.42	102.65	102.87	103.10	103.32	103.55	103.77
30	99.50	99.72	99.95	100.17	100.40	100.62	100.75	100.97	101.20	101.42
29	97.25	97.47	97.70	97.92	98.15	98.37	98.60	98.82	99.05	99.27
28	95.00	95.22	95.45	95.67	95.90	96.12	96.35	96.57	96.80	97.02
27	92.75	92.97	93.20	93.42	93.65	93.87	94.10	94.32	94.55	94.77
26	90.50	90.72	90.95	91.17	91.40	91.62	91.85	92.07	92.30	92.52
25	88.25	88.47	88.70	88.92	89.15	89.37	89.60	89.82	90.05	90.27
24	86.00	86.22	86.45	86.67	86.90	87.12	87.35	87.57	87.80	88.02
23	83.75	83.97	84.20	84.42	84.65	84.87	85.10	85.32	85.55	85.77
22	81.50	81.72	81.95	82.17	82.40	82.62	82.85	83.07	83.30	83.52
21	79.25	79.47	79.70	79.92	80.15	80.37	80.60	80.82	81.05	81.27
20	77.00	77.22	77.45	77.67	77.90	78.12	78.35	78.57	78.80	79.02
19	74.75	74.97	75.20	75.42	75.65	75.87	76.10	76.32	76.55	76.77
18	72.50	72.72	72.95	73.17	73.40	73.62	73.85	74.07	74.30	74.52
17	70.25	70.47	70.70	70.92	71.15	71.37	71.60	71.82	72.05	72.27
16	68.00	68.22	68.45	68.67	68.90	69.12	69.35	69.57	69.80	70.02
15	65.75	65.97	66.20	66.42	66.65	66.87	67.10	67.32	67.55	67.77
14	63.50	63.72	63.95	64.17	64.40	64.62	64.85	65.07	65.30	65.52
13	61.25	61.47	61.70	61.92	62.15	62.37	62.60	62.82	63.05	63.27
12	59.00	59.22	59.45	59.67	59.90	60.12	60.35	60.57	60.80	61.02
11	56.75	56.97	57.20	57.42	57.65	57.87	58.10	58.32	58.55	58.77
10	54.50	54.72	54.95	55.17	55.40	55.62	55.85	56.07	56.30	56.52
9	52.25	52.47	52.70	52.92	53.15	53.37	53.60	53.82	54.05	54.27
8	50.00	50.22	50.45	50.67	50.90	51.12	51.35	51.57	51.80	52.02
7	47.75	47.97	48.20	48.42	48.65	48.87	49.10	49.32	49.55	49.77
6	45.50	45.72	45.95	46.17	46.40	46.62	46.85	47.07	47.30	47.52
5	43.25	43.47	43.70	43.92	44.15	44.37	44.60	44.82	45.05	45.27
4	41.00	41.22	41.45	41.67	41.90	42.12	42.35	42.57	42.80	43.02
3	38.75	38.97	39.20	39.42	39.65	39.87	40.10	40.32	40.55	40.77
2	36.50	36.72	36.95	37.17	37.40	37.62	37.85	38.07	38.30	38.52
1	34.25	34.47	34.70	34.92	35.15	35.37	35.60	35.82	36.05	36.27
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**

Degrees of Réaumur.	Tenths of Degrees.									
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**
	Fahren.	Fahren.	Fahren.	Fahren.	Fahren.	Fahren.	Fahren.	Fahren.	Fahren.	Fahren.
+ 0	+32.00	+32.22	+32.45	+32.67	+32.90	+33.12	+33.35	+33.57	+33.80	+34.02
− 0	32.00	31.77	31.55	31.32	31.10	30.87	30.65	30.42	30.20	29.97
− 1	29.75	29.52	29.30	29.07	28.85	28.62	28.40	28.17	27.95	27.72
− 2	27.50	27.27	27.05	26.82	26.60	26.37	26.15	25.92	25.70	25.47
− 3	25.25	25.02	24.80	24.57	24.35	24.12	23.90	23.67	23.45	23.22
− 4	23.00	22.77	22.55	22.32	22.10	21.87	21.65	21.42	21.20	20.97
− 5	20.75	20.52	20.30	20.07	19.85	19.62	19.40	19.17	18.95	18.72
− 6	18.50	18.27	18.05	17.82	17.60	17.37	17.15	16.92	16.70	16.47
− 7	16.25	16.02	15.80	15.57	15.35	15.12	14.90	14.67	14.45	14.22
− 8	14.00	13.77	13.55	13.32	13.10	12.87	12.65	12.42	12.20	11.97
− 9	11.75	11.52	11.30	11.07	10.85	10.62	10.40	10.17	9.95	9.72
−10	9.50	9.27	9.05	8.82	8.60	8.37	8.15	7.92	7.70	7.47
−11	7.25	7.02	6.80	6.57	6.35	6.12	5.90	5.67	5.45	5.22
−12	5.00	4.77	4.55	4.32	4.10	3.87	3.65	3.42	3.20	2.97
−13	2.75	2.52	2.30	2.07	1.85	1.62	1.40	1.17	0.95	0.72
−14	0.50	0.27	0.05	− 0.17	− 0.40	− 0.62	− 0.85	− 1.07	− 1.30	− 1.52
−15	− 1.75	− 1.97	− 2.20	− 2.42	− 2.65	− 2.87	− 3.10	− 3.32	− 3.55	− 3.77
−16	− 4.00	− 4.22	− 4.45	− 4.67	− 4.90	− 5.12	− 5.35	− 5.57	− 5.80	− 6.02
−17	− 6.25	− 6.47	− 6.70	− 6.92	− 7.15	− 7.37	− 7.60	− 7.82	− 8.05	− 8.27
−18	− 8.50	− 8.72	− 8.95	− 9.17	− 9.40	− 9.62	− 9.85	−10.07	−10.30	−10.52
−19	−10.75	−10.97	−11.20	−11.42	−11.65	−11.87	−12.10	−12.32	−12.55	−12.77
−20	−13.00	−13.22	−13.45	−13.67	−13.90	−14.12	−14.35	−14.57	−14.80	−15.02
−21	−15.25	−15.47	−15.70	−15.92	−16.15	−16.37	−16.60	−16.82	−17.05	−17.27
−22	−17.50	−17.72	−17.95	−18.17	−18.40	−18.62	−18.85	−19.07	−19.30	−19.52
−23	−19.75	−19.97	−20.20	−20.42	−20.65	−20.87	−21.10	−21.32	−21.55	−21.77
−24	−22.00	−22.22	−22.45	−22.67	−22.90	−23.12	−23.35	−23.57	−23.80	−24.02
−25	−24.25	−24.47	−24.70	−24.92	−25.15	−25.37	−25.60	−25.82	−26.05	−26.27
−26	−26.50	−26.72	−26.95	−27.17	−27.40	−27.62	−27.85	−28.07	−28.30	−28.52
−27	−28.75	−28.97	−29.20	−29.42	−29.65	−29.87	−30.10	−30.32	−30.55	−30.77
−28	−31.00	−31.22	−31.45	−31.67	−31.90	−32.12	−32.35	−32.57	−32.80	−33.02
−29	−33.25	−33.47	−33.70	−33.92	−34.15	−34.37	−34.60	−34.82	−35.05	−35.27
−30	−35.50	−35.72	−35.95	−36.17	−36.40	−36.62	−36.85	−37.07	−37.30	−37.52
−31	−37.75	−37.97	−38.20	−38.42	−38.65	−38.87	−39.10	−39.32	−39.55	−39.77
−32	−40.00	−40.22	−40.45	−40.67	−40.90	−41.12	−41.35	−41.57	−41.80	−42.02
−33	−42.25	−42.47	−42.70	−42.92	−43.15	−43.37	−43.60	−43.82	−44.05	−44.27
−34	−44.50	−44.72	−44.95	−45.17	−45.40	−45.62	−45.85	−46.07	−46.30	−46.52
−35	−46.75	−46.97	−47.20	−47.42	−47.65	−47.87	−48.10	−48.32	−48.55	−48.77
−36	−49.00	−49.22	−49.45	−49.67	−49.90	−50.12	−50.35	−50.57	−50.80	−51.02
−37	−51.25	−51.47	−51.70	−51.92	−52.15	−52.37	−52.60	−52.82	−53.05	−53.27
−38	−53.50	−53.72	−53.95	−54.17	−54.40	−54.62	−54.85	−55.07	−55.30	−55.52
−39	−55.75	−55.97	−56.20	−56.42	−56.65	−56.87	−57.10	−57.32	−57.55	−57.77
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**

Degrees of Reaumur.	Tenths of Degrees.									
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**
	Centig.	Centig.	Centig.	Centig.	Centig.	Centig.	Centig.	Centig.	Centig.	Centig.
±40	±50.00	±50.13	±50.25	±50.38	±50.50	±50.63	±50.75	±50.88	±51.00	±51.13
39	48.75	48.88	49.00	49.13	49.25	49.38	49.50	49.63	49.75	49.88
38	47.50	47.63	47.75	47.88	48.00	48.13	48.25	48.38	48.50	48.63
37	46.25	46.38	46.50	46.63	46.75	46.88	47.00	47.13	47.25	47.38
36	45.00	45.13	45.25	45.38	45.50	45.63	45.75	45.88	46.00	46.13
35	43.75	43.88	44.00	44.13	44.25	44.38	44.50	44.63	44.75	44.88
34	42.50	42.63	42.75	42.88	43.00	43.13	43.25	43.38	43.50	43.63
33	41.25	41.38	41.50	41.63	41.75	41.88	42.00	42.13	42.25	42.38
32	40.00	40.13	40.25	40.38	40.50	40.63	40.75	40.88	41.00	41.13
31	38.75	38.88	39.00	39.13	39.25	39.38	39.50	39.63	39.75	39.88
30	37.50	37.63	37.75	37.88	38.00	38.13	38.25	38.38	38.50	38.63
29	36.25	36.38	36.50	36.63	36.75	36.88	37.00	37.13	37.25	37.38
28	35.00	35.13	35.25	35.38	35.50	35.63	35.75	35.88	36.00	36.13
27	33.75	33.88	34.00	34.13	34.25	34.38	34.50	34.63	34.75	34.88
26	32.50	32.63	32.75	32.88	33.00	33.13	33.25	33.38	33.50	33.63
25	31.25	31.38	31.50	31.63	31.75	31.88	32.00	32.13	32.25	32.38
24	30.00	30.13	30.25	30.38	30.50	30.63	30.75	30.88	31.00	31.13
23	28.75	28.88	29.00	29.13	29.25	29.38	29.50	29.63	29.75	29.88
22	27.50	27.63	27.75	27.88	28.00	28.13	28.25	28.38	28.50	28.63
21	26.25	26.38	26.50	26.63	26.75	26.88	27.00	27.13	27.25	27.38
20	25.00	25.13	25.25	25.38	25.50	25.63	25.75	25.88	26.00	26.13
19	23.75	23.88	24.00	24.13	24.25	24.38	24.50	24.63	24.75	24.88
18	22.50	22.63	22.75	22.88	23.00	23.13	23.25	23.38	23.50	23.63
17	21.25	21.38	21.50	21.63	21.75	21.88	22.00	22.13	22.25	22.38
16	20.00	20.13	20.25	20.38	20.50	20.63	20.75	20.88	21.00	21.13
15	18.75	18.88	19.00	19.13	19.25	19.38	19.50	19.63	19.75	19.88
14	17.50	17.63	17.75	17.88	18.00	18.13	18.25	18.38	18.50	18.63
13	16.25	16.38	16.50	16.63	16.75	16.88	17.00	17.13	17.25	17.38
12	15.00	15.13	15.25	15.38	15.50	15.63	15.75	15.88	16.00	16.13
11	13.75	13.88	14.00	14.13	14.25	14.38	14.50	14.63	14.75	14.88
10	12.50	12.63	12.75	12.88	13.00	13.13	13.25	13.38	13.50	13.63
9	11.25	11.38	11.50	11.63	11.75	11.88	12.00	12.13	12.25	12.38
8	10.00	10.13	10.25	10.38	10.50	10.63	10.75	10.88	11.00	11.13
7	8.75	8.88	9.00	9.13	9.25	9.38	9.50	9.63	9.75	9.88
6	7.50	7.63	7.75	7.88	8.00	8.13	8.25	8.38	8.50	8.63
5	6.25	6.38	6.50	6.63	6.75	6.88	7.00	7.13	7.25	7.38
4	5.00	5.13	5.25	5.38	5.50	5.63	5.75	5.88	6.00	6.13
3	3.75	3.88	4.00	4.13	4.25	4.38	4.50	4.63	4.75	4.88
2	2 50	2.63	2.75	2.88	3.00	3.13	3.25	3.38	3.50	3.63
1	1.25	1.38	1.50	1.63	1.75	1.88	2.00	2.13	2.25	2.38
°	°	°	°	°	°	°	°	°	°	°
0	0.00	0.13	0.25	0.38	0.50	0.63	0.75	0.88	1.00	1.13
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**

X. NUMBER OF DEGREES OF FAHRENHEIT = NUMBER OF CENTIGRADE DEGREES.

Degrees of Fahrenheit.	Tenths of a Degree.									
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**
	Centig.	Centig.	Centig.	Centig.	Centig.	Centig.	Centig.	Centig.	Centig.	Centig.
0	0.00	0.06	0.11	0.17	0.22	0.28	0.33	0.39	0.44	0.50
1	0.56	0.61	0.67	0.72	0.78	0.83	0.89	0.94	1.00	1.06
2	1.11	1.17	1.22	1.28	1.33	1.39	1.44	1.50	1.56	1.61
3	1.67	1.72	1.78	1.83	1.89	1.94	2.00	2.06	2.11	2.22
4	2.22	2.28	2.33	2.39	2.44	2.50	2.56	2.61	2.67	2.72
5	2.78	2.83	2.89	2.94	3.00	3.06	3.11	3.17	3.22	3.28
6	3.33	3.39	3.44	3.50	3.56	3.61	3.67	4.72	3.78	3.83
7	3.89	3.94	4.00	4.06	4.11	4.17	4.22	4.28	4.33	4.39
8	4.44	4.50	4.56	4.61	4.67	4.72	4.78	4.83	4.89	4.94
9	5.00	5.06	5.11	5.17	5.22	5.28	5.32	5.39	5.44	5.50

XI. NUMBER OF DEGREES OF FAHRENHEIT = NUMBER OF DEGREES OF REAUMUR.

Degrees of Fahrenheit.	Tenths of a Degree.									
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**
	Reaumur.	Reaumur.	Reaumur.	Reaumur.	Reaumur.	Reaumur	Reaumur.	Reaumur.	Reaumur.	Reaumur.
0	0.00	0.04	0.09	0.13	0.18	0.22	0.27	0.31	0.36	0.40
1	0.44	0.49	0.53	0.58	0.62	0.67	0.71	0.76	0.80	0.84
2	0.89	0.93	0.98	1.02	1.07	1.11	1.16	1.20	1.24	1.29
3	1.33	1.38	1.42	1.47	1.51	1.56	1.60	1.64	1.69	1.73
4	1.78	1.82	1.87	1.91	1.96	2.00	2.04	2.09	2.13	2.18
5	2.22	2.27	2.31	2.36	2.40	2.44	2.49	2.53	2.58	2.62
6	2.67	2.71	2.76	2.80	2.84	2.89	2.93	2.98	3.02	3.07
7	3.11	3.16	3.20	3.24	3.29	3.33	3.38	3.42	3.47	3.51
8	3.56	3.60	3.64	3.69	3.73	3.78	3.82	3.87	3.91	3.96
9	4.00	4.04	4.09	4.13	4.18	4.22	4.27	4.31	4.36	4.40

XII. NUMBER OF CENTIGRADE DEGREES = NUMBER OF DEGREES OF REAUMUR.

Centig. Degrees.	Tenths of a Degree.									
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**
	Reaumur.	Reaumur	Reaumur.	Reaumur.	Reaumur	Reaumur.	Reaumur.	Reaumur.	Reaumur.	Reaumur.
0	0.00	0.08	0.16	0.24	0.32	0.40	0.48	0.56	0.64	0.72
1	0.80	0.88	0.96	1.04	1.12	1.20	1.28	1.36	1.44	1.52
2	1.60	1.68	1.76	1.84	1.92	2.00	2.08	2.16	2.24	2.32
3	2.40	2.48	2.56	2.64	2.72	2.80	2.88	2.96	3.04	3.12
4	3.20	3.28	3.36	3.44	3.52	3.60	3.68	3.76	3.84	3.92
5	4.00	4.08	4.16	4.24	4.32	4.40	4.48	4.56	4.64	4.72
6	4.80	4.88	4.96	5.04	5.12	5.20	5.28	5.36	5.44	5.52
7	5.60	5.68	5.76	5.84	5.92	6.00	6.08	6.16	6.24	6.32
8	6.40	6.48	6.56	6.64	6.72	6.80	6.88	6.96	7.04	7.12
9	7.20	7.28	7.36	7.44	7.52	7.60	7.68	7.76	7.84	7.92

XIII. NUMBER OF CENTIGRADE DEGREES = NUMBER OF DEGREES OF FAHRENHEIT.

Centig. Degrees.	Tenths of a Degree.									
	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.
	Fahr.	Fahr.	Fahr.	Fahr.	Fahr.	Fahr.	Fahr.	Fahr.	Fahr.	Fahr.
0	0.00	0.18	0.36	0.54	0.72	0.90	1.08	1.26	1.44	1.62
1	1.80	1.98	2.16	2.34	2.52	2.70	2.88	3.06	3.24	3.42
2	3.60	3.78	3.96	4.14	4.32	4.50	4.68	4.86	5.04	5.22
3	5.40	5.58	5.76	5.94	6.12	6.30	6.48	6.66	6.84	7.02
4	7.20	7.38	7.56	7.74	7.92	8.10	8.28	8.46	8.64	8.82
5	9.00	9.18	9.36	9.54	9.72	9.90	10.08	10.26	10.44	10.62
6	10.80	10.98	11.16	11.34	11.52	11.70	11.88	12.06	12.24	12.42
7	12.60	12.78	12.96	13.14	13.32	13.50	13.68	13.86	14.04	14.22
8	14.40	14.58	14.76	14.94	15.12	15.30	15.48	15.66	15.84	16.02
9	16.20	16.38	16.56	16.74	16.92	17.10	17.28	17.46	17.64	17.82

XIV. NUMBER OF DEGREES OF REAUMUR = NUMBER OF CENTIGRADE DEGREES.

Degrees of Reaum.	Tenths of a Degree.									
	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.
	Centig.	Centig.	Centig.	Centig.	Centig.	Centig.	Centig.	Centig.	Centig.	Centig.
0	0.00	0.12	0.25	0.37	0.50	0.62	0.75	0.87	1.00	1.12
1	1.25	1.37	1.50	1.62	1.75	1.87	2.00	2.12	2.25	2.37
2	2.50	2.62	2.75	2.87	3.00	3.12	3.25	3.37	3.50	3.62
3	3.75	3.87	4.00	4.12	4.25	4.37	4.50	4.62	4.75	4.87
4	5.00	5.12	5.25	5.37	5.50	5.62	5.75	5.87	6.00	6.12
5	6.25	6.37	6.50	6.62	6.75	6.87	7.00	7.12	7.25	7.37
6	7.50	7.62	7.75	7.87	8.00	8.12	8.25	8.37	8.50	8.62
7	8.75	8.87	9.00	9.12	9.25	9.37	9.50	9.62	9.75	9.87
8	10.00	10.12	10.25	10.37	10.50	10.62	10.75	10.87	11.00	11.12
9	11.25	11.37	11.50	11.62	11.75	11.87	12.00	12.12	12.25	12.37

XV. NUMBER OF DEGREES OF REAUMUR = NUMBER OF DEGREES OF FAHRENHEIT.

Degrees of Reaum.	Tenths of a Degree.									
	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.
	Fahr.	Fahr.	Fahr.	Fahr.	Fahr.	Fahr.	Fahr.	Fahr.	Fahr.	Fahr.
0	0.00	0.22	0.45	0.67	0.90	1.12	1.35	1.57	1.80	2.02
1	2.25	2.47	2.70	2.92	3.15	3.37	3.60	3.82	4.05	4.27
2	4.50	4.72	4.95	5.17	5.40	5.62	5.85	6.07	6.30	6.52
3	6.75	6.97	7.20	7.42	7.65	7.87	8.10	8.32	8.55	8.77
4	9.00	9.22	9.45	9.67	9.90	10.12	10.35	10.57	10.80	11.02
5	11.25	11.47	11.70	11.92	12.15	12.37	12.60	12.82	13.05	13.27
6	13.50	13.72	13.95	14.17	14.40	14.62	14.85	15.07	*15.30	15.52
7	15.75	15.97	16.20	16.42	16.65	16.87	17.10	17.32	17.55	17.77
8	18.00	18.22	18.45	18.67	18.90	19.12	19.35	19.57	19.80	20.02
9	20.25	20.47	20.70	20.92	21.15	21.37	21.60	21.82	22.05	22.27

METEOROLOGICAL TABLES.

II.

HYGROMETRICAL TABLES.

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TABLES OF ELASTIC FORCES OF AQUEOUS VAPOR,

BY REGNAULT AND BY AUGUST.

TABLE I., from —10° to +35°, is taken from V. Regnault's *Études sur l'Hygrométrie*, in the *Annales de Chimie et de Physique*, Tom. XV. For the sake of the calculation of the Psychrometrical Tables, it has been extended down to —35°, and up to +40°, by means of the Table of Elastic Forces of Vapor, of the same author, to be found in the same periodical, Tom. XI. p. 333. For the fractions of degrees the mean values have been adopted.

Table II., calculated by M. August, after the experiments of Dalton, and converted into Centigrade degrees and millimetres, is given for comparison. It is taken from the French translation of Kaemtz's *Meteorology*, by Ch. Martins. The tables calculated by Kaemtz, after his own experiments, and published in the same work, give values which are generally a little lower than those of Regnault.

I. ELASTIC FORCE OF AQUEOUS VAPOR,

EXPRESSED IN MILLIMETRES OF MERCURY FOR EVERY TENTH OF A CENTIGRADE DEGREE

By REGNAULT.

Temperature Centigrade.	Tenths of Degrees.									
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**
o	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.
−35	0.290	0.288	0.286	0.284	0.282	0.280	0.279	0 277	0.275	0.273
−34	0.311	0.309	0.307	0.305	0.303	0.300	0.298	0.296	0.294	0.292
−33	0.334	0.332	0.329	0.327	0.325	0.322	0.320	0.318	0.316	0.313
−32	0.360	0.357	0.355	0.352	0.350	0.347	0.344	0.342	0.339	0.336
−31	0.389	0.386	0.383	0.380	0.377	0.374	0.372	0.369	0.366	0.363
−30	0.421	0.418	0.415	0.411	0.408	0.405	0.402	0.399	0.395	0.392
−29	0.456	0.452	0.449	0.445	0.442	0.438	0.435	0.431	0.428	0.424
−28	0.493	0.489	0.486	0.482	0.478	0.474	0.471	0.467	0.463	0.460
−27	0.533	0.529	0.525	0.521	0.517	0.513	0.509	0.505	0.501	0 497
−26	0.577	0.573	0.568	0.564	0.559	0.555	0.551	0.546	0.542	0.537
−25	0.624	0.619	0.615	0.610	0.605	0.600	0.596	0.591	0.586	0.582
−24	0.676	0.671	0.666	0.660	0.655	0.650	0.645	0.640	0.634	0.629
−23	0.731	0.725	0.720	0.714	0.709	0.703	0.698	0.692	0.687	0.681
−22	0.791	0.785	0.779	0.773	0.767	0.761	0.755	0.749	0.743	0.737
−21	0.857	0.850	0.844	0.837	0.831	0.824	0.817	0.811	0.804	0.798
−20	0.927	0.920	0.913	0.906	0.899	0.892	0.885	0.878	0.871	0.864
−19	1.005	0.997	0.989	0.982	0.974	0.966	0.958	0.950	0.942	0.935
−18	1.088	1.080	1.071	1.063	1.055	1.046	1.038	1.030	1.022	1.013
−17	1.179	1.170	1.161	1.152	1.143	1.133	1.124	1.115	1.106	1.097
−16	1.277	1.267	1.257	1.248	1.238	1.228	1.218	1.208	1.199	1.189
−15	1.385	1.372	1.358	1.345	1.333	1.322	1.312	1.302	1.292	1.283
−14	1.503	1.489	1.477	1.466	1.454	1.442	1.431	1.419	1.408	1.396
−13	1.628	1.615	1.602	1.589	1.577	1.564	1.552	1.540	1.527	1.515
−12	1.764	1.750	1.735	1.722	1.708	1.694	1.681	1.668	1.654	1.641
−11	1.915	1.897	1.882	1.866	1.851	1.836	1.822	1.807	1.793	1.778
−10	2.078	2.062	2.045	2.029	2.012	1.996	1.979	1.963	1.947	1.931
− 9	2.261	2.242	2.223	2.204	2.186	2.168	2.150	2.132	2.114	2.096
− 8	2.456	2.436	2.416	2.396	2.376	2.356	2.337	2.318	2.299	2.280
− 7	2.666	2.645	2.624	2.603	2.582	2.561	2.540	2.519	2.498	2.477
− 6	2.890	2.867	2.844	2.821	2.798	2.776	2.754	2.732	2.710	2.688
− 5	3.131	3.106	3.082	3.058	3.034	3.010	2.986	2.962	2.938	2.914
− 4	3.387	3.361	3.335	3.309	3.283	3.257	3.231	3.206	3.181	3.156
− 3	3.662	3.634	3.606	3.578	3.550	3.522	3.495	3.468	3.441	3.414
− 2	3.955	3.925	3.895	3.865	3.836	3.807	3.778	3.749	3.720	3.691
− 1	4.267	4.235	4.203	4.171	4.140	4.109	4.078	4.047	4.016	3.985
− 0	4.600	4.565	4.531	4.497	4.463	4.430	4.397	4.364	4.331	4.299
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**

Centigrade Degrees.	Tenths of Degrees.									
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**
o	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.
0	4.600	4.633	4.667	4.700	4.733	4.767	4.801	4.836	4.871	4.905
1	4.940	4.975	5.011	5.047	5.082	5.118	5.155	5.191	5.228	5.265
2	5.302	5.340	5.378	5.416	5.454	5.491	5.530	5.569	5.608	5.647
3	5.687	5.727	5.767	5.807	5.848	5.889	5.930	5.972	6.014	6.055
4	6.097	6.140	6.183	6.226	6.270	6.313	6.357	6.401	6.445	6.490
5	6.534	6.580	6.625	6.671	6.717	6.763	6.810	6.857	6.904	6.951
6	6.998	7.047	7.095	7.144	7.193	7.242	7.292	7.342	7.392	7.442
7	7.492	7.544	7.595	7.647	7.699	7.751	7.804	7.857	7.910	7.964
8	8.017	8.072	8.126	8.181	8.236	8.291	8.347	8.404	8.461	8.517
9	8.574	8.632	8.690	8.748	8.807	8.865	8.925	8.985	9.045	9.105
10	9.165	9.227	9.288	9.350	9.412	9.474	9.537	9.601	9.665	9.728
11	9.792	9.857	9.923	9.989	10.054	10.120	10.187	10.255	10.322	10.389
12	10.457	10.526	10.596	10.665	10.734	10.804	10.875	10.947	11.019	11.090
13	11.162	11.235	11.309	11.383	11.456	11.530	11.605	11.681	11.757	11.832
14	11.908	11.986	12.064	12.142	12.220	12.298	12.378	12.458	12.538	12.619
15	12.699	12.781	12.864	12.947	13.029	13.112	13.197	13.281	13.366	13.451
16	13.536	13.623	13.710	13.797	13.885	13.972	14.062	14.151	14.241	14.331
17	14.421	14.513	14.605	14.697	14.790	14.882	14.977	15.072	15.167	15.262
18	15.357	15.454	15.552	15.650	15.747	15.845	15.945	16.045	16.145	16.246
19	16.346	16.449	16.552	16.655	16.758	16.861	16.967	17.073	17.179	17.285
20	17.391	17.500	17.608	17.717	17.826	17.935	18.047	18.159	18.271	18.383
21	18.495	18.610	18.724	18.839	18.954	19.069	19.187	19.305	19.423	19.541
22	19.659	19.780	19.901	20.022	20.143	20.265	20.389	20.514	20.639	20.763
23	20.410	21.016	21.144	21.272	21.400	21.528	21.659	21.790	21.921	22.053
24	22.184	22.319	22.453	22.588	22.723	22.858	22.996	23.135	23.273	23.411
25	23.550	23.692	23.834	23.976	24.119	24.261	24.406	24.552	24.697	24.842
26	24.988	25.138	25.288	25.438	25.588	25.738	25.891	26.045	26.198	26.351
27	26.505	26.663	26.820	26.978	27.136	27.294	27.455	27.617	27.778	27.939
28	28.101	28.267	28.433	28.599	28.765	28.931	29.101	29.271	29.441	29.612
29	29.782	29.956	30.131	30.305	30.479	30.654	30.833	31.011	31.190	31.369
30	31.548	31.729	31.911	32.094	32.278	32.463	32.650	32.837	33.026	33.215
31	33.405	33.596	33.787	33.980	34.174	34.368	34.564	34.761	34.959	35.159
32	35.359	35.559	35.760	35.962	36.165	36.370	36.576	36.783	36.991	37.200
33	37.410	37.621	37.832	38.045	38.258	38.473	38.689	38.906	39.124	39.344
34	39.565	39.786	40.007	40.230	40.455	40.680	40.907	41.135	41.364	41.595
35	41.827	42.059	42.292	42.526	42.761	42.997	43.235	43.473	43.713	43.954
36	44.201	44.450	44.699	44.948	45.197	45.446	45.695	45.944	46.193	46.442
37	46.691	46.952	47.213	47.474	47.735	47.996	48.258	48.519	48.780	49.041
38	49.302	49.576	49.849	50.123	50.397	50.670	50.944	51.218	51.492	51.765
39	52.039	52.326	52.612	52.899	53.186	53.472	53.759	54.046	54.333	54.619
40	54.906	55.206	55.507	55.807	56.108	56.408	56.708	57.009	57.309	57.610
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**

II. ELASTIC FORCE OF AQUEOUS VAPOR,

EXPRESSED IN MILLIMETRES OF MERCURY FOR EVERY TENTH OF A CENTIGRADE DEGREE.

CALCULATED BY AUGUST.

Centigrade Degrees.	Tenths of Degrees.									
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**
°	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.
−31	0.45	0.45	0.45	0.44	0.44	0.43	0.43	0.42	0.42	0.41
−30	0.50	0.49	0.49	0.48	0.48	0.47	0.47	0.46	0.46	0.45
−29	0.54	0.54	0.54	0.53	0.53	0.52	0.52	0.51	0.51	0.50
−28	0.59	0.58	0.58	0.57	0.57	0.56	0.56	0.55	0.55	0.54
−27	0.63	0.63	0.63	0.62	0.62	0.61	0.61	0.60	0.60	0.59
−26	0.70	0.69	0.68	0.68	0.67	0.66	0.66	0.65	0.64	0 64
−25	0.77	0.76	0.75	0.75	0.74	0.73	0.73	0.72	0.71	0 71
−24	0.83	0.83	0.82	0.82	0.81	0.80	0.80	0.79	0.78	0.78
−23	0 90	0.89	0.88	0.88	0.87	0.86	0.86	0.85	0.84	0.84
−22	0.99	0.98	0.97	0.96	0.95	0.95	0.94	0.93	0.92	0.91
−21	1.06	1.05	1.04	1.04	1.03	1.02	1.02	1.01	1.00	1.00
−20	1.15	1.14	1.13	1.12	1.11	1.11	1.10	1.09	1.08	1.07
−19	1.26	1.25	1.24	1.23	1.22	1.21	1.20	1.18	1.17	1.16
−18	1.33	1.32	1.31	1.31	1.30	1.29	1.29	1.28	1.27	1.27
−17	1.44	1.43	1.42	1.41	1.40	1.39	1.38	1.36	1.35	1.34
−16	1.56	1.54	1.53	1.52	1.51	1.50	1.49	1.47	1.46	1.45
−15	1.69	1.68	1.67	1.65	1.64	1.63	1.61	1.60	1.59	1.57
−14	1.80	1.79	1.78	1.77	1.76	1.75	1.74	1.72	1.71	1.70
−13	1.96	1.94	1.93	1.91	1.89	1.88	1.86	1.85	1.83	1.82
−12	2.12	2.10	2.09	2.07	2.05	2.04	2.02	2.01	1.99	1.98
−11	2.30	2.28	2.26	2.25	2.23	2.21	2.19	2.17	2.16	2.14
−10	2.48	2.46	2.44	2.43	2.41	2.39	2.37	2.35	2.34	2.32
− 9	2.66	2.64	2.62	2.61	2.59	2.57	2.55	2.53	2.52	2.50
− 8	2.86	2.84	2.82	2.80	2.78	2.76	2.74	2.72	2.70	2.68
− 7	3.09	3.06	3.04	3.02	3.00	2.97	2.95	2.93	2.91	2.88
− 6	3.32	3.29	3.27	3.25	3.23	3.20	3.18	3.16	3.14	3.11
− 5	3.56	3.56	3.54	3.51	3.48	3.46	3.43	3.40	3.37	3.35
− 4	3.83	3.80	3.78	3.75	3.72	3.70	3.67	3.64	3.61	3.59
− 3	4.11	4.07	4.05	4.02	3.99	3.97	3.94	3.91	3.88	3.86
− 2	4.40	4.37	4.34	4.32	4.29	4.26	4.23	4.20	4.17	4.14
− 1	4.71	4.68	4.65	4.62	4.59	4.56	4.53	4.49	4.46	4.43
− 0	5.05	5.01	4.98	4.95	4.91	4.88	4.85	4.81	4.78	4.74
+ 0	5.05	5.09	5.12	5.16	5.19	5.23	5.27	5.30	5.34	5.37
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**

Centigrade Degrees.	Tenths of Degrees.									
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**
	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.
°										
1	5.41	5.45	5.49	5.52	5.56	5.60	5.64	5.68	5.72	5.75
2	5.80	5.84	5.88	5.92	5.96	6.00	6.04	6.08	6.13	6.17
3	6.20	6.24	6.29	6.33	6.37	6.41	6.46	6.50	6.54	6.59
4	6.63	6.68	6.72	6.77	6.81	6.86	6.90	6.95	6.99	7.04
5	7.08	7.13	7.18	7.23	7.28	7.33	7.38	7.43	7.48	7.53
6	7.58	7.63	7.68	7.74	7.79	7.84	7.89	7.94	7.99	8.05
7	8.10	8.15	8.21	8.26	8.32	8.37	8.43	8.48	8.53	8.59
8	8.64	8.70	8.76	8.82	8.87	8.93	8.99	9.05	9.11	9.17
9	9.23	9.30	9.36	9.43	9.50	9.57	9.63	9.70	9.77	9.84
10	9.90	9.96	10.02	10.08	10.14	10.20	10.25	10.31	10.37	10.43
11	10.49	10.56	10.63	10.69	10.76	10.83	10.90	10.96	11.03	11.10
12	11.17	11.24	11.31	11.38	11.45	11.52	11.59	11.66	11.73	11.80
13	11.86	11.94	12.02	12.10	12.18	12.26	12.34	12.42	12.50	12.58
14	12.66	12.74	12.82	12.90	12.98	13.05	13.13	13.21	13.29	13.37
15	13.44	13.52	13.61	13.69	13.77	13.86	13.94	14.02	14.11	14.19
16	14.28	14.37	14.47	14.56	14.65	14.74	14.84	14.93	15.02	15.11
17	15.20	15.29	15.38	15.46	15.55	15.64	15.73	15.82	15.90	15.99
18	16.08	16.17	16.27	16.36	16.45	16.54	16.64	16.73	16.82	16.91
19	17.01	17.13	17.25	17.37	17.49	17.61	17.73	17.85	17.97	18.09
20	18.20	18.31	18.43	18.54	18.65	18.76	18.88	18.99	19.10	19.21
21	19.33	19.45	19.56	19.68	19.80	19.92	20.03	20.15	20.27	20.39
22	20.51	20.63	20.76	20.88	21.01	21.13	21.25	21.38	21.50	21.63
23	21.75	21.88	22.00	22.13	22.26	22.38	22.51	22.63	22.76	22.89
24	23.01	23.13	23.24	23.36	23.48	23.60	23.71	23.83	23.95	24.07
25	24.18	24.34	24.50	24.67	24.83	24.99	25.15	25.32	25.48	25.64
26	25.81	25.97	26.13	26.28	26.44	26.60	26.76	26.92	27.07	27.23
27	27.39	27.55	27.71	27.86	28.02	28.18	28.34	28.50	28.65	28.81
28	28.96	29.13	29.29	29.46	29.63	29.79	29.96	30.13	30.30	30.46
29	30.63	30.81	30.98	31.16	31.33	31.51	31.69	31.86	32.04	32.21
30	32.39	32.57	32.76	32.94	33.13	33.31	33.50	33.68	33.87	34.05
31	34.24	34.43	34.63	34.82	35.02	35.21	35.40	35.60	35.79	35.99
32	36.18	36.38	36.59	36.79	36.99	37.20	37.40	37.60	37.80	38.01
33	38.21	38.43	38.64	38.86	39.08	39.29	39.51	39.73	39.94	40.16
34	40.38	40.60	40.82	41.04	41.26	41.49	41.71	41.93	42.15	42.37
35	42.59	42.82	43.05	43.28	43.51	43.74	43.97	44.20	44.43	44.66
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**

III.

PSYCHROMETRICAL TABLES.

GIVING IMMEDIATELY THE FORCE OF AQUEOUS VAPOR AND THE RELATIVE HUMIDITY FROM THE INDICATIONS OF THE PSYCHROMETER.

Calculated by M. T. Haeghens.

In his *Etudes sur l'Hygrométrie*,* M. V. Regnault discusses the theoretical bases of the formula of the Psychrometer, given by M. August, which was,

$$x = f' - \frac{0.568\,(t-t')}{610-t'}\,h,$$

in which h represents the height of the barometer; t the temperature of the air given by the dry-bulb thermometer; t' the temperature of the wet-bulb thermometer; f' the force of aqueous vapor in the saturated air at a temperature equal to t'; x the elastic force of aqueous vapor which exists in the air at the time of the observation.

After having modified some of the numerical values, which form the coefficients, M. Regnault adopted this formula,

$$x = f' - \frac{0.429\,(t-t')}{610-t'}\,h.$$

But comparative experiments, made by himself, showed that by substituting the coefficient 0.480 for that of 0.429, the calculated results, and those obtained by direct observation, agree perfectly in the fractions of saturation, which are greater than 0.40. This formula thus modified, or

$$x = f' - \frac{0.480\,(t-t')}{610-t'}\,h,$$

has been used for calculating the following tables. In that part of the tables which supposes the wet-bulb to be covered with a film of ice, or below the freezing point, the value $610 - t'$, which represents the latent heat of aqueous vapor, has been changed into this: $610 + 79 - t' = 689 - t'$.

The only hypothesis made, is that of a mean barometric pressure h, equal to 755 millimetres. If we take into account the causes of errors inherent to the psychrometer, and to the tables of the force of vapor, by means of which the absolute force of vapor is calculated, as well as to the differences of these tensions, taken at temperatures differing only by *one* tenth of a degree, it will be obvious that the correction due to the variations of barometric pressure can almost always be neglected. Nevertheless, a separate table has been calculated, giving the *correction* to be applied to the numbers in the Psychrometrical Tables for the heights of the barometer between 650 and 800 millimetres. It will be found at the end of the tables.

The disposition of the tables is the following: —

The temperatures are noted in centigrade degrees; the elastic force of vapor in the air, or its pressure on the barometer, is expressed in millimetres of mercury; the rel-

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* *Etudes sur l'Hygrométrie*, par M. V. Regnault. *Annales de Chimie et de Physique*, 3me Série, Tom. XV., 1845.

ative humidity is indicated in per cent. of the full saturation of the air at the corresponding temperature of the dry-bulb thermometer t.

The first vertical column contains the indications of the wet-bulb thermometer t', beginning with the temperatures below the freezing point, when the bulb is covered with ice, from —35°, and continuing from the freezing point up to +35° centigrade, the bulb being simply wet.

The second column gives the differences of the force of vapor for each tenth (0°.1) of a degree, between each full degree of the first column. It enables the observer to find out the correction for any fraction of a degree of the wet-bulb thermometer.

The following double columns give immediately the force of vapor and the relative humidity, corresponding to each degree of the wet-bulb, placed in the first column, on the same horizontal line, and to differences of the two thermometers, or to $t - t'$, taken at every two tenths of a degree.

The horizontal column at the bottom indicates the mean difference, for each tenth of a degree, of the force of vapor contained in the same horizontal line. It gives the correction for the intermediate differences of the thermometers; 0.1, 0.3, 0.5, 0.7, 0.9, &c., &c.

To meet the wants arising from the extreme climate of North America, the tables of Mr. Haeghens have been extended from —15° to —35° centigrade, and from +30° to +35° of temperature of the wet-bulb, and to +40° of temperature of the dry-bulb thermometer. The forces of aqueous vapor of Regnault, as given in Table XIX., have been used for the calculations.

Use of the Tables.

Enter the tables with the difference of the two thermometers, or $t - t'$, and with the temperature of the wet-bulb thermometer t', taking the first three pages, when the temperature of the wet-bulb is below the freezing point; and the following ones when it is above the freezing point.

Seek first the column at the head of which you find the difference of the thermometers; go down as far as the horizontal line, at the beginning of which you see the temperature of the wet-bulb thermometer; there you find the force of vapor, and the relative humidity corresponding to your observation.

Two corrections for fractions may be required for a complete calculation of the force of vapor; one for the fractions of degrees of the wet-bulb thermometer; another for the intermediate differences of the two thermometers, viz. for 0.1, 0.3, 0.5, 0.7, &c.

The first correction for fractions of degrees of the wet-bulb thermometer is found by multiplying the decimal fraction by the number placed in the second vertical column next to the whole degree, which number is the value of a tenth of a degree. The product must be *added* to the value of the full degree given in the table, when the temperature of the wet-bulb is above the freezing point: it must be *subtracted* when the temperature is below the freezing point, and bears the sign —. This correction is too important to be neglected.

The second correction, less important, for the intermediate differences of the ther-

mometers, which are greater by one tenth than those indicated in the tables, is given in the horizontal column at the bottom of the page. It is *constant* and always *subtractive.*

Examples of Calculation.

Difference of thermometers, or $t - t'$ = 0°.8.
Temperature of the wet-bulb thermometer, t' = 11°.0.
We find, page 14, for $t - t'$, fifth double column; and for t', first column,
The force of vapor in the air = 9^{mm}.31.
Relative humidity, = 90.

Difference of thermometers, or $t - t'$, = 7°.2.
Wet-bulb thermometer, or t', = 17°.9.
We find, page 20, for $t - t'$, = 7°.2, and t' = 17°.0, force of vapor 10^{mm}.02.
Additive correction for fraction 0°.9, or 9 × 0.09 = 0 .81.

Force of vapor in the air = 10 .83.
Relative humidity, 46

Difference of thermometers, $t - t'$ = 6°.5.
Wet-bulb thermometer, t' = 23°.6.
We find, page 19, for t' = 23°.0, and $t - t'$, or difference, = 6°.4, force of vapor 16^{mm}.94; applying immediately the correction found at the bottom of the page for one tenth more difference, or 6°.4 + 0.1 = 6°.5, we have,
Force of vapor = 16^{mm}.94 — 0.06, or 16^{mm}.88.
Additive correction for fraction 0.6 of the wet-bulb, 6 × 0.13 = 0 .78.

Force of vapor in the air = 17 .66.
Relative humidity, 56.

The wet-bulb thermometer covered with ice.

Difference of thermometers, $t - t'$ = 2°.8.
Wet-bulb thermometer (ice), t' = —8°.5.
Page 13 gives for $t - t'$ = 2°.8, and t' = —8°.0, force of vapor = 1^{mm}.0.
Subtractive correction for fraction 0.5 of wet-bulb, 5 × 0.019 = —0 .1.

Force of vapor in the air = 0 .9.
Relative humidity, 30.

Below the Freezing Point; the Bulb Covered with a Film of Ice.

Wet-Bulb Thermometer. t'. Centigrade Degrees.	Mean Vertical Difference for each 0°.1.	$t - t'$, Difference of Wet and Dry-Bulb Thermometers.											
		0°.0		0°.2		0°.4		0°.6		0°.8		1°.0	
		Force of Vapor.	Relative Humidity.	Force of Vapor.	Relative Humidity.	Force of Vapor.	Relative Humidity.	Force of Vapor.	Relative Humidity.	Force of Vapor.	Relative Humidity.	Force of Vapor.	Relative Humidity.
o	Millim.	Millim.		Millim.		Millim.		Millim.		Millim.		Millim.	
−35	0.002	0.29	100	0.19	63	0.09	29						
−34	0.002	0.31	100	0.21	66	0.11	33						
−33	0.003	0.33	100	0.23	69	0.13	37						
−32	0.003	0.36	100	0.26	71	0.15	42	0.05	13				
−31	0.003	0.39	100	0.29	73	0.18	46	0.08	19				
−30	0.003	0.42	100	0.32	75	0.22	50	0.12	25				
−29	0.003	0.46	100	0.35	76	0.25	53	0.15	30	0.04	8		
−28	0 004	0.49	100	0.39	78	0.29	57	0.19	36	0.08	15		
−27	0.004	0.53	100	0.43	79	0.33	59	0.23	40	0.12	21		
−26	0.004	0.58	100	0.47	81	0.37	62	0.27	45	0.17	28	0.06	11
−25	0.005	0.62	100	0.52	82	0.42	65	0.32	48	0.21	32	0.11	16
−24	0.005	0.68	100	0.57	83	0.47	67	0.37	52	0.27	37	0.16	22
−23	0.006	0.73	100	0.63	85	0.53	70	0.42	55	0.32	41	0.22	28
−22	0.006	0.79	100	0.69	86	0.59	72	0.48	58	0.38	45	0.28	33
−21	0.007	0.86	100	0.75	86	0.65	73	0.55	61	0.45	49	0.35	37
−20	0.007	0.93	100	0.82	87	0.72	75	0.62	64	0.52	53	0.42	42
−19	0.008	1.00	100	0.90	88	0.80	76	0.70	65	0.60	55	0.49	45
−18	0.008	1.09	100	0.99	89	0.88	78	0.78	68	0.68	59	0.58	49
−17	0.009	1.18	100	1.08	90	0.97	80	0.87	70	0.77	61	0.67	52
−16	0.010	1.28	100	1.18	91	1.07	82	0.97	73	0.87	64	0.76	55
−15	0.011	1.39	100	1.28	91	1.18	82	1.08	74	0.97	66	0.87	58
−14	0.013	1.50	100	1.40	91	1.30	84	1.19	76	1.09	68	0.99	61
−13	0.013	1.63	100	1.52	92	1.42	85	1.32	77	1.22	70	1.11	63
−12	0.015	1.76	100	1.66	92	1.56	86	1.45	79	1.35	72	1.25	65
−11	0.017	1.92	100	1.81	93	1.71	86	1.60	80	1.50	74	1.40	67
−10	0.018	2.08	100	1.97	94	1.87	87	1.77	81	1.66	75	1.56	69
− 9	0.019	2.26	100	2.16	94	2.05	88	1.95	82	1.85	76	1.74	71
− 8	0.021	2.46	100	2.35	94	2.25	89	2.14	83	2.04	78	1.94	73
− 7	0.023	2.67	100	2.56	94	2.46	89	2.35	84	2.25	79	2.15	74
− 6	0.024	2.89	100	2.79	95	2.68	90	2.58	85	2.47	80	2.37	76
− 5	0.025	3.13	100	3.03	95	2.92	90	2.82	86	2.71	81	2.61	77
− 4	0.028	3.39	100	3.28	95	3.18	91	3.07	87	2.97	82	2.86	78
− 3	0.029	3.66	100	3.56	96	3.45	92	3.35	87	3.24	83	3.14	79
− 2	0.031	3.96	100	3.85	96	3.75	92	3.64	88	3.54	84	3.43	80
− 1	0.033	4.27	100	4.16	96	4.06	92	3.95	89	3.85	85	3.74	81
− 0		4.60	100										

Mean Horizontal Difference of Force of Vapor for each 0°.1 = 0.05 mm.

Below the Freezing Point; the Bulb Covered with a Film of Ice.

Wet-Bulb Thermometer. t′ Centigrade Degrees.	Mean Vertical Difference for each 0°.1.	t − t′, Difference of Wet and Dry-Bulb Thermometers.											
		1°.2		1°.4		1°.6		1°.8		2°.0		2°.2	
		Force of Vapor.	Relative Humidity.	Force of Vapor.	Relative Humidity.	Force of Vapor.	Relative Humidity.	Force of Vapor.	Relative Humidity.	Force of Vapor.	Relative Humidity.	Force of Vapor.	Relative Humidity.
o	Millim.	Millim.		Millim.		Millim.		Millim.		Millim.		Millim.	
−35													
−34													
−33													
−32													
−31													
−30													
−29													
−28													
−27													
−26													
−25													
−24	0.006	0.06	8										
−23	0.006	0.12	15										
−22	0.007	0.18	21	0.08	9								
−21	0.007	0.24	25	0.14	14	0.04	4						
−20	0.008	0.31	31	0.21	21	0.11	10						
−19	0.008	0.39	35	0.29	26	0.19	17	0.09	8				
−18	0.009	0.47	39	0.37	30	0.27	22	0.17	13	0.07	5		
−17	0.010	0.57	44	0.46	35	0.36	27	0.26	19	0.15	11	0.05	4
−16	0.011	0.66	47	0.56	39	0.46	32	0.36	24	0.25	17	0.15	10
−15	0.013	0.77	50	0.66	43	0.56	36	0.46	29	0.36	22	0.25	15
−14	0.013	0.88	54	0.78	46	0.68	40	0.57	33	0.47	26	0.37	21
−13	0.015	1.01	56	0.91	50	0.80	43	0.70	37	0.60	31	0.49	25
−12	0.017	1.14	59	1.04	53	0.94	47	0.83	41	0.73	35	0.63	30
−11	0.018	1.29	61	1.19	55	1.09	50	0.98	44	0.88	39	0.78	34
−10	0.019	1.46	63	1.35	58	1.25	52	1.15	47	1.04	42	0.94	38
− 9	0.021	1.64	66	1.53	61	1.43	56	1.33	51	1.22	46	1.12	41
− 8	0.023	1.83	68	1.73	63	1.62	58	1.52	54	1.42	49	1.31	45
− 7	0.024	2.04	69	1.94	65	1.83	61	1.73	56	1.63	52	1.52	48
− 6	0.025	2.26	71	2.16	67	2.06	63	1.95	59	1.85	55	1.74	51
− 5	0.028	2.50	73	2.40	69	2.30	65	2.19	61	2.09	57	1.98	53
− 4	0.029	2.76	74	2.65	70	2.55	67	2.45	63	2.34	59	2.24	55
− 3	0.031	3.03	75	2.93	72	2.82	68	2.72	65	2.61	61	2.51	58
− 2		3.33	77	3.22	73	3.12	70	3.01	66	2.91	63		
− 1													

Mean Horizontal Difference of Force of Vapor for each 0°.1 = 0.05 mm.

Below the Freezing Point; the Bulb Covered with a Film of Ice.

Wet-Bulb Thermometer. t' Centigrade Degrees.	Mean Vertical Difference for each 0°.1.	$t - t'$, Difference of Wet and Dry-Bulb Thermometers.											
		2°.4		2°.6		2°.8		3°.0		3°.2		3°.4	
		Force of Vapor.	Relative Humidity.	Force of Vapor.	Relative Humidity.	Force of Vapor.	Relative Humidity.	Force of Vapor.	Relative Humidity.	Force of Vapor.	Relative Humidity.	Force of Vapor.	Relative Humidity.
0	Millim.	Millim		Millim.		Millim.		Millim.		Millim.		Millim.	
−15		0.39	9	0.05	3								
−14	0.011	0.26	15	0.16	9	0.06	4						
−13	0.013	0.39	20	0.29	14	0.18	9	0.08	4				
−12	0.013	0.52	24	0.42	19	0.32	14	0.21	9	0.11	5		
−11	0.015	0.67	29	0.57	24	0.46	19	0.36	15	0.26	10	0.15	6
	0.016												
−10		0.83	33	0.73	28	0.63	24	0.52	20	0.42	16	0.32	12
− 9	0.018	1.02	37	0.91	33	0.81	28	0.70	24	0.60	20	0.50	17
− 8	0.019	1.21	40	1.10	36	1.00	32	0.90	28	0.79	25	0.69	21
− 7	0.021	1.42	44	1.31	40	1.21	36	1.11	32	1.00	29	0.90	26
− 6	0.022	1.64	47	1.54	43	1.43	40	1.33	36	1.22	33	1.12	30
	0.024												
− 5		1.88	50	1.77	46	1.67	43	1.57	40	1.46	36	1.36	33
− 4	0.025	2.13	52	2.03	49	1.92	46	1.82	43	1.71	40	1.61	37
− 3	0.027	2.40	55	2.30	52	2.19	48	2.09	45				
− 2													
− 1													
− 0													

		3°.6		3°.8		4°.0		4°.2		4°.4		4°.6	
		Millim.		Millim.		Millim.		Millim.		Millim.		Millim.	
−15													
−14													
−13													
−12													
−11		0.05	2										
	0.016												
−10		0.21	8	0.11	4								
− 9	0.018	0.39	13	0.29	9	0.19	6	0.08	3				
− 8	0.019	0.58	18	0.48	14	0.38	11	0.27	8	0.17	5	0.06	2
− 7	0.021	0.79	22	0.69	19	0.59	16	0.48	13	0.38	10	0.27	7
− 6	0.022	1.01	26	0.91	23	0.81	20	0.70	17	0.60	15	0.49	12
	0.024												
− 5		1.25	30	1.15	27	1.04	24	0.94	22	0.83	19	0.73	16
− 4	0.025	1.50	34	1.40	31	1.30	28						
− 3													
− 2													
− 1													

Mean Horizontal Difference of Force of Vapor for each 0°.1 = 0.05 mm.

Wet-Bulb Thermometer. t′ Centigrade Degrees.	Mean Vertical Difference for each 0°.1	t — t′, Difference of Wet and Dry-Bulb Thermometers.											
		0°.0		0°.2		0°.4		0°.6		0°.8		1°.0	
		Force of Vapor.	Relative Humidity.	Force of Vapor.	Relative Humidity.	Force of Vapor.	Relative Humidity.	Force of Vapor.	Relative Humidity.	Force of Vapor.	Relative Humidity.	Force of Vapor.	Relative Humidity.
o	Millim.	Millim.		Millim.		Millim		Millim.		Millim.		Millim.	
0		4.60	100	4.48	96	4.36	92	4.24	88	4.12	85	4.01	81
1	0.03	4.94	100	4.82	96	4.70	93	4.58	89	4.46	85	4.35	82
2	0.04	5.30	100	5.18	96	5.06	93	4.94	89	4.83	86	4.71	83
3	0.04	5.69	100	5.57	97	5.45	93	5.33	90	5.21	87	5.09	83
4	0.04	6.10	100	5.98	97	5.86	93	5.74	90	5.62	87	5.50	84
5	0.04	6.53	100	6.41	97	6.29	94	6.17	91	6.05	88	5.94	85
6	0.05	7.00	100	6.88	97	6.76	94	6.64	91	6.52	88	6.40	85
7	0.05	7.49	100	7.37	97	7.25	94	7.13	91	7.01	89	6.89	86
8	0.05	8.02	100	7.90	97	7.78	94	7.66	92	7.54	89	7.42	86
9	0.05	8.57	100	8.45	97	8.33	95	8.21	92	8.09	89	7.97	86
10	0.06	9.17	100	9.04	97	8.92	95	8.80	93	8.68	90	8.56	86
11	0.06	9.79	100	9.67	97	9.55	95	9.43	93	9.31	90	9.19	87
12	0.07	10.46	100	10.34	98	10.21	95	10.09	93	9.97	90	9.85	88
13	0.07	11.16	100	11.04	98	10.92	95	10.80	93	10.68	91	10.56	89
14	0.07	11.91	100	11.79	98	11.66	95	11.54	93	11.42	91	11.30	89
15	0.08	12.70	100	12.58	98	12.46	96	12.33	93	12.21	91	12.09	89
16	0.08	13.54	100	13.41	98	13.29	96	13.17	94	13.05	92	12.93	90
17	0.09	14.42	100	14.30	98	14.18	96	14.05	94	13.93	92	13.81	90
18	0.09	15.36	100	15.23	98	15.11	96	14.99	94	14.87	92	14.75	90
19	0.10	16.35	100	16.22	98	16.10	96	15.98	94	15.86	92	15.73	91
20	0.10	17.39	100	17.27	98	17.15	96	17.02	94	16.90	92	16.78	91
21	0.11	18.50	100	18.37	98	18.25	96	18.13	94	18.00	92	17.88	91
22	0.12	19.66	100	19.54	98	19.41	96	19.29	95	19.17	93	19.04	91
23	0.12	20.89	100	20.76	98	20.64	96	20.52	95	20.39	93	20.27	91
24	0.13	22.18	100	22.06	98	21.94	97	21.81	95	21.69	93	21.57	92
25	0.14	23.55	100	23.43	98	23.30	97	23.18	95	23.05	93	22.93	92
26	0.14	24.99	100	24.86	98	24.74	97	24.62	95	24.49	93	24.37	92
27	0.15	26.51	100	26.38	98	26.26	97	26.13	95	26.01	93	25.88	92
28	0.16	28.10	100	27.98	98	27.85	97	27.73	95	27.60	93	27.48	92
29	0.17	29.78	100	29.66	98	29.53	97	29.41	95	29.28	94	29.16	92
30	0.18	31.55	100	31.42	98	31.30	97	31.17	95	30.05	94	30.92	93
31	0.19	33.40	100	33.28	98	33.15	97	33.03	96	32.90	94	32.78	93
32	0.20	35.36	100	35.23	99	35.11	97	34.98	96	34.86	94	34.73	93
33	0.21	37.41	100	37.28	99	37.16	98	37.03	96	36.91	94	36.78	93
34	0.22	39.56	100	39.43	99	39.31	98	39.18	96	39.06	94	38.93	93
35	0.23	41.83	100	41.70	99	41.58	98	41.45	96	41.33	95	41.20	93

Mean Horizontal Difference of Force of Vapor for each 0°.1 = 0.06 mm.

Wet-Bulb Thermometer. t' Centigrade Degrees	Mean Vertical Difference for each 0°.1.	$t - t'$, Difference of Wet and Dry-Bulb Thermometers.											
		1°.2		1°.4		1°.6		1°.8		2°.0		2°.2	
		Force of Vapor.	Relative Humidity.	Force of Vapor.	Relative Humidity.	Force of Vapor.	Relative Humidity.	Force of Vapor.	Relative Humidity.	Force of Vapor.	Relative Humidity.	Force of Vapor.	Relative Humidity.
°	Millim.	Millim.		Millim.		Millim.		Millim.		Millim.		Millim.	
0	0.03	3.89	78	3.77	74	3.65	71	3.53	67	3.41	64	3.29	61
1	0.04	4.23	79	4.11	75	3.99	72	3.87	69	3.75	66	3.63	63
2	0.04	4.59	80	4.47	76	4.35	73	4.23	70	4.11	67	3.99	65
3	0.04	4.97	80	4.85	77	4.73	74	4.61	71	4.49	69	4.37	66
4	0.04	5.38	81	5.26	78	5.14	75	5.02	73	4.90	70	4.78	67
5	0.05	5.82	82	5.70	79	5.58	77	5.46	74	5.34	71	5.22	69
6	0.05	6.28	83	6.16	80	6.04	77	5.92	75	5.80	72	5.68	70
7	0.05	6.77	83	6.65	81	6.53	78	6.41	76	6.29	73	6.17	71
8	0.06	7.29	84	7.17	81	7.05	79	6.93	76	6.81	74	6.69	72
9	0.06	7.85	84	7.73	82	7.61	80	7.49	77	7.37	75	7.25	73
10	0.06	8.44	85	8.32	83	8.20	80	8.08	78	7.96	76	7.84	74
11	0.07	9.07	86	8.95	83	8.82	81	8.70	79	8.58	77	8.46	75
12	0.07	9.73	86	9.61	84	9.49	82	9.37	80	9.25	78	9.12	76
13	0.08	10.43	86	10.31	84	10.19	82	10.07	80	9.95	78	9.83	76
14	0.08	11.18	87	11.06	85	10.94	83	10.81	81	10.69	79	10.57	77
15	0.08	11.97	87	11.85	85	11.73	83	11.60	81	11.48	80	11.36	78
16	0.09	12.80	88	12.68	86	12.56	84	12.44	82	12.32	80	12.19	78
17	0.09	13.69	88	13.57	86	13.44	84	13.32	83	13.20	81	13.08	79
18	0.10	14.62	88	14.50	87	14.38	85	14.26	83	14.13	81	14.01	80
19	0.11	15.61	89	15.49	87	15.37	85	15.24	83	15.12	82	15.00	80
20	0.11	16.65	89	16.53	87	16.41	86	16.29	84	16.16	82	16.04	81
21	0.12	17.76	89	17.63	88	17.51	86	17.39	84	17.27	83	17.14	81
22	0.12	18.92	90	18.80	88	18.67	86	18.55	85	18.43	83	18.30	82
23	0.13	20.15	90	20.02	88	19.90	87	19.78	85	19.65	83	19.53	82
24	0.14	21.44	90	21.32	88	21 20	87	21.07	85	20.95	84	20.82	82
25	0.14	22.81	90	22.68	89	22.56	87	22.44	86	22.31	84	22.19	83
26	0.15	24.24	90	24.12	89	23.99	87	23.87	86	23.75	85	23.62	83
27	0.16	25.76	91	25.63	89	25.51	88	25.39	86	25.26	85	25.14	83
28	0.17	27.35	91	27.23	89	27.10	88	26.98	87	26.86	85	26.73	84
29	0.18	29.03	91	28.91	90	28.78	88	28.66	87	28.53	85	28.41	84
30	0.19	30.80	91	30.67	90	30.55	89	30.42	87	30.30	86	30.17	84
31	0.20	32.65	91	32.53	90	32.40	89	32.28	87	32.15	86	32.03	85
32	0.21	34.61	91	34.48	90	34.36	89	34.23	88	34.11	86	33.98	85
33	0.22	36.66	92	36.53	90	36.41	89	36.28	88	36.16	86	36.03	85
34	0.23	38.81	92	38.68	90	38.56	89	38.43	88	38.31	87	38.18	85
35		41.07	92	40.94	91	40.82	89	40.69	88	40.57	87	40.44	86

Mean Horizontal Difference of Force of Vapor for each 0°.1 = 0.06 mm.

Wet-Bulb Thermometer. t′ Centigrade Degrees.	Mean Vertical Difference for each 0°.1.	t − t′, Difference of Wet and Dry-Bulb Thermometers.											
		2°.4		2°.6		2°.8		3°.0		3°.2		3°.4	
		Force of Vapor.	Relative Humidity.	Force of Vapor.	Relative Humidity.	Force of Vapor.	Relative Humidity.	Force of Vapor.	Relative Humidity.	Force of Vapor.	Relative Humidity.	Force of Vapor.	Relative Humidity.
o	Millim.	Millim.		Millim.		Millim		Millim.		Millim.		Millim.	
0		3.17	58	3.06	55	2.94	52	2.82	50	2.70	47	2.58	44
1	0.03	3.51	60	3.39	57	3.27	54	3.16	52	3.04	49	2.92	47
2	0.04	3.87	62	3.75	59	3.63	56	3.51	54	3.39	51	3.28	49
3	0.04	4.25	63	4.13	61	4.02	58	3.90	56	3.78	53	3.66	51
4	0.04	4.66	65	4.54	62	4.42	60	4.30	57	4.18	55	4.06	53
5	0.04	5.10	66	4.98	64	4.86	61	4.74	59	4.62	57	4.50	55
6	0.05	5.56	67	5.44	65	5.32	63	5.20	61	5.08	58	4.96	56
7	0.05	6.05	69	5.93	66	5.81	64	5.69	62	5.57	60	5.45	58
8	0.05	6.57	70	6.45	68	6.33	65	6.21	63	6.09	61	5.97	59
9	0.06	7.13	71	7.01	69	6.89	67	6.77	65	6.64	63	6.52	61
10	0.06	7.72	72	7.59	70	7.47	68	7.35	66	7.23	64	7.11	62
11	0.06	8.34	73	8.22	71	8.10	69	7.98	67	7.86	65	7.74	63
12	0.07	9.00	74	8.88	72	8.76	70	8.64	68	8.52	66	8.40	64
13	0.07	9.71	75	9.58	73	9.46	71	9.34	69	9.22	67	9.10	66
14	0.07	10.45	75	10.33	73	10.21	72	10.08	70	9.96	68	9.84	67
15	0.08	11.24	76	11.12	74	10.99	72	10.87	71	10.75	69	10.63	67
16	0.08	12.07	77	11.95	75	11.83	73	11.71	72	11.58	70	11.46	68
17	0.09	12.95	77	12.83	76	12.71	74	12.59	72	12.47	71	12.34	69
18	0.09	13.89	78	13.77	76	13.64	75	13.52	73	13.40	72	13.28	70
19	0.10	14.87	78	14.75	77	14.63	75	14.51	74	14.38	72	14.26	71
20	0.10	15.92	79	15.79	77	15.67	76	15.55	74	15.43	73	15.30	72
21	0.11	17.02	80	16.90	78	16.77	77	16.65	75	16.53	74	16.40	72
22	0.12	18.18	80	18.06	79	17.93	77	17.81	76	17.69	74	17.56	73
23	0.12	19.41	80	19.28	79	19.16	78	19.04	76	18.91	75	18.79	73
24	0.13	20.70	81	20.58	79	20.45	78	20.33	77	20.21	75	20.08	74
25	0.14	22.06	81	21.94	80	21.82	79	21.69	77	21.57	76	21.45	75
26	0.14	23.50	82	23.37	80	23.25	79	23.13	78	23.00	77	22.88	75
27	0.15	25.01	82	24.89	81	24.76	79	24.64	78	24.51	77	24.39	76
28	0.16	26.61	83	26.48	81	26.36	80	26.23	79	26.11	77	25.98	76
29	0.17	28.28	83	28.16	81	28.03	80	27.91	79	27.69	77	27.76	76
30	0.18	30.05	83	29.92	82	29.80	81	29.67	79	29.55	78	29.42	77
31	0.19	31.90	83	31.78	82	31.65	81	31.53	80	31.40	78	31.28	77
32	0.20	33.86	84	33.73	82	33.61	81	33.48	80	33.36	79	33.23	78
33	0.21	35.90	84	35.77	83	35.65	81	35.52	80	35.40	79	35.27	78
34	0.22	38.06	84	37.93	83	37.81	82	37.68	81	37.56	80	37.43	78
35	0.23	40.31	84	40.18	83	40.06	82	39.93	81	39.81	80	39.68	79

Mean Horizontal Difference of Force of Vapor for each 0°.1 = 0.06 mm.

Wet-Bulb Thermometer. t′ Centigrade Degrees.	Mean Vertical Difference for each 0°.1.	t − t′, Difference of Wet and Dry-Bulb Thermometers.											
		3°.6		3°.8		4°.0		4°.2		4°.4		4°.6	
		Force of Vapor.	Relative Humidity.	Force of Vapor.	Relative Humidity.	Force of Vapor.	Relative Humidity.	Force of Vapor.	Relative Humidity.	Force of Vapor.	Relative Humidity.	Force of Vapor.	Relative Humidity.
o	Millim.	Millim.		Millim.		Millim		Millim.		Millim.		Millim.	
0	0.03	2.46	41	2.34	39	2.22	36	2.11	34	1.99	32	1.87	29
1	0.04	2.80	44	2.68	42	2.56	39	2.44	37	2.32	35	2.20	32
2	0.04	3.16	46	3.04	44	2.92	42	2.80	39	2.68	37	2.56	35
3	0.04	3.54	49	3.42	46	3.30	44	3.18	42	3.06	40	2.94	38
4	0.04	3.94	51	3.82	48	3.71	46	3.59	44	3.47	42	3.35	40
5	0.05	4.38	52	4.26	50	4.14	48	4.02	46	3.90	44	3.78	42
6	0.05	4.84	54	4.72	52	4.60	50	4.48	48	4.36	46	4.24	44
7	0.05	5.33	56	5.21	54	5.09	52	4.97	50	4.85	48	4.73	46
8	0.06	5.85	57	5.73	56	5.61	54	5.49	52	5.37	50	5.25	48
9	0.06	6.40	59	6.28	57	6.16	55	6.04	53	5.92	52	5.80	50
10	0.06	6.99	60	6.87	58	6.75	57	6.63	55	6.51	53	6.39	52
11	0.07	7.61	61	7.49	60	7.37	58	7.25	56	7.13	55	7.01	53
12	0.07	8.28	62	8.15	61	8.03	59	7.91	58	7.79	56	7.67	55
13	0.07	8.98	64	8.85	63	8.73	61	8.61	59	8.49	57	8.37	56
14	0.08	9.72	65	9.60	63	9.48	62	9.35	60	9.23	59	9.11	57
15	0.08	10.51	66	10.38	64	10.26	63	10.14	61	10.02	60	9.90	58
16	0.09	11.34	67	11.22	65	11.10	64	10.97	62	10.85	61	10.73	59
17	0.09	12.22	68	12.10	67	11.98	65	11.85	63	11.73	62	11.61	61
18	0.10	13.15	69	13.03	67	12.91	66	12.79	64	12.66	63	12.54	62
19	0.11	14.14	69	14.02	68	13.89	66	13.77	65	13.65	64	13.53	62
20	0.11	15.18	70	15.06	69	14.94	67	14.81	66	14.69	65	14.57	63
21	0.12	16.28	71	16.16	69	16.04	68	15.91	67	15.79	65	15.67	64
22	0.12	17.44	71	17.32	70	17.20	69	17.07	67	16.95	66	16.83	65
23	0.13	18.67	72	18.54	71	18.42	69	18.30	68	18.17	67	18.05	66
24	0.14	19.96	73	19.84	71	19.71	70	19.59	69	19.46	68	19.34	66
25	0.14	21.32	73	21.20	72	21.07	71	20.95	70	20.83	68	20.70	67
26	0.15	22.75	74	22.63	73	22.50	71	22.38	70	22.26	69	22.13	68
27	0.16	24.27	74	24.14	73	24.02	72	23.89	71	23.77	70	23.64	68
28	0.17	25.86	75	25.73	74	25.61	72	25.48	71	25.36	70	25.24	69
29	0.18	27.44	75	27.31	74	27.29	73	27.16	72	27.04	71	26.91	70
30	0.19	29.30	76	29.17	75	29.05	73	28.92	72	28.80	71	28.67	70
31	0.20	31.15	76	31.03	75	30.90	74	30.78	73	30.65	72	30.53	71
32	0.21	33.10	77	32.97	76	32.85	75	32.72	73	32.60	72	32.47	71
33	0.22	35.15	77	35.02	76	34.90	75	34.77	74	34.65	73	34.52	72
34	0.23	37.30	77	37.17	76	37.05	75	36.92	74	36.80	73	36.67	72
35		39.56	78	39.43	77	39.31	76	39.18	74	39.06	73	38.93	72

Mean Horizontal Difference of Force of Vapor for each 0°.1 = 0.06 mm.

Wet-Bulb Thermometer. t′ Centigrade Degrees.	Mean Vertical Difference for each 0°.1.	t − t′, Difference of Wet and Dry-Bulb Thermometers.											
		4°.8		5°.0		5°.2		5°.4		5°.6		5°.8	
		Force of Vapor.	Relative Humidity.	Force of Vapor.	Relative Humidity.	Force of Vapor.	Relative Humidity.	Force of Vapor.	Relative Humidity.	Force of Vapor.	Relative Humidity.	Force of Vapor.	Relative Humidity.
°	Millim.	Millim.		Millim.		Millim.		Millim.		Millim.		Millim.	
0	0.03	1.75	27	1.63	25	1.51	23	1.39	21	1.27	19	1.15	17
1	0.04	2.08	30	1.97	28	1.85	26	1.73	24	1.61	22	1.49	20
2	0.04	2.44	33	2.32	31	2.20	29	2.08	27	1.96	25	1.85	23
3	0.04	2.82	36	2.70	34	2.58	32	2.46	30	2.34	28	2.22	26
4	0.04	3.23	38	3.11	36	2.99	34	2.87	33	2.75	31	2.63	29
5	0.05	3.66	40	3.54	39	3.42	37	3.30	35	3.18	33	3.06	32
6	0.05	4.12	43	4.00	41	3.88	39	3.76	37	3.64	36	3.52	34
7	0.05	4.61	45	4.49	43	4.37	41	4.25	40	4.13	38	4.01	36
8	0.06	5.13	47	5.01	45	4.89	43	4.77	42	4.65	40	4.53	39
9	0.06	5.68	48	5.56	47	5.44	45	5.32	44	5.20	42	5.08	41
10	0.06	6.27	50	6.15	48	6.02	47	5.90	45	5.78	44	5.66	42
11	0.07	6.89	52	6.77	50	6.65	49	6.53	47	6.40	46	6.28	44
12	0.07	7.55	53	7.43	52	7.31	50	7.18	49	7.06	47	6.94	46
13	0.07	8.25	55	8.13	53	8.01	52	7.88	50	7.76	49	7.64	47
14	0.08	8.99	56	8.87	54	8.75	53	8.62	51	8.50	50	8.38	49
15	0.08	9.78	57	9.65	55	9.53	54	9.41	53	9.29	51	9.17	50
16	0.09	10.61	58	10.49	57	10.36	55	10.24	54	10.12	53	10.00	51
17	0.09	11.49	59	11.37	58	11.24	56	11.12	55	11.00	54	10.88	53
18	0.10	12.42	60	12.30	59	12.17	58	12.05	56	11.93	55	11.81	54
19	0.11	13.40	61	13.28	60	13.16	59	13.04	57	12.91	56	12.79	55
20	0.11	14.44	62	14.32	61	14.20	60	14.08	58	13.95	57	13.83	56
21	0.12	15.54	63	15.42	62	15.30	60	15.17	59	15.05	58	14.93	57
22	0.12	16.70	64	16.58	63	16.46	61	16.33	60	16.21	59	16.09	58
23	0.13	17.93	65	17.80	63	17.68	62	17.56	61	17.43	60	17.31	59
24	0.14	19.22	65	19.09	64	18.97	63	18.85	62	18.72	61	18.60	60
25	0.14	20.58	66	20.46	65	20.33	64	20.21	63	20.08	62	19.96	60
26	0.15	22.01	67	21.88	65	21.76	64	21.63	63	21.51	62	21.39	61
27	0.16	23.52	67	23.40	66	23.27	65	23.15	64	23.02	63	22.90	62
28	0.17	25.11	68	24.99	67	24.86	66	24.74	65	24.61	64	24.49	63
29	0.18	26.79	68	26.66	67	26.54	66	26.41	65	26.29	64	26.16	63
30	0.19	28.55	69	28.42	68	28.30	67	28.17	66	28.05	65	27.92	64
31	0.20	30.40	70	30.28	69	30.15	68	30.03	67	29.90	66	29.78	65
32	0.21	32.35	70	32.22	69	32.10	68	31.97	67	31.85	66	31.72	65
33	0.22	34.40	71	34.27	70	34.15	69	34.02	68	33.90	67	33.77	66
34	0.23	36.55	71	36.42	70	36.30	69	36.17	68	36.05	67	35.92	66
35		38.80	71	38.68	70								

Mean Horizontal Difference of Force of Vapor for each 0°.1 = 0.06 mm.

Wet-Bulb Thermometer. t' Centigrade Degrees.	Mean Vertical Difference for each 0°.1.	$t - t'$, Difference of Wet and Dry-Bulb Thermometers. 6°.0		6°.2		6°.4		6°.6		6°.8		7°.0	
		Force of Vapor.	Relative Humidity.	Force of Vapor.	Relative Humidity.	Force of Vapor.	Relative Humidity.	Force of Vapor.	Relative Humidity.	Force of Vapor.	Relative Humidity.	Force of Vapor.	Relative Humidity.
o	Millim.	Millim.		Millim.		Millim.		Millim.		Millim.		Millim.	
0	0.03	1.04	15	0.92	13	0.80	11	0.68	9	0.56	8	0.44	6
1	0.04	1.37	18	1.25	16	1.13	15	1.01	13	0.89	11	0.78	10
2	0.04	1.73	22	1.61	20	1.49	18	1.37	16	1.25	15	1.13	13
3	0.04	2.11	25	1.99	23	1.87	21	1.75	19	1.63	18	1.51	16
4	0.04	2.51	28	2.39	26	2.27	24	2.15	23	2.03	21	1.91	19
5	0.05	2.94	30	2.82	28	2.70	27	2.58	25	2.46	24	2.34	22
6	0.05	3.40	33	3.28	31	3.16	29	3.04	28	2.92	26	2.80	25
7	0.05	3.89	35	3.77	33	3.65	32	3.53	30	3.41	29	3.29	28
8	0.06	4.41	37	4.28	35	4.16	34	4.04	33	3.92	31	3.80	30
9	0.06	4.96	39	4.84	38	4.71	36	4.59	35	4.47	33	4.35	32
10	0.06	5.54	41	5.42	40	5.30	38	5.18	37	5.06	35	4.94	34
11	0.07	6.16	43	6.04	41	5.92	40	5.80	39	5.68	37	5.56	36
12	0.07	6.82	44	6.70	43	6.58	42	6.46	41	6.34	39	6.22	38
13	0.07	7.52	46	7.40	45	7.28	43	7.16	42	7.03	41	6.91	40
14	0.08	8.26	47	8.14	46	8.02	45	7.90	44	7.77	43	7.65	41
15	0.08	9.05	49	8.92	48	8.80	46	8.68	45	8.56	44	8.44	43
16	0.09	9.88	50	9.75	49	9.63	48	9.51	47	9.39	45	9.27	44
17	0.09	10.76	52	10.63	50	10.51	49	10.39	48	10.27	47	10.14	46
18	0.10	11.69	53	11.56	51	11.44	50	11.32	49	11.20	48	11.07	47
19	0.11	12.67	54	12.55	53	12.42	51	12.30	50	12.18	49	12.06	48
20	0.11	13.71	55	13.58	54	13.46	53	13.34	52	13.22	50	13.09	49
21	0.12	14.81	56	14.68	55	14.56	54	14.44	53	14.31	52	14.19	51
22	0.12	15.96	57	15.84	56	15.72	55	15.59	54	15.47	53	15.35	52
23	0.13	17.19	58	17.06	57	16.94	56	16.82	55	16.69	54	16.57	53
24	0.14	18.48	59	18.35	58	18.23	56	18.11	55	17.98	54	17.86	53
25	0.14	19.84	59	19.71	58	19.59	57	19.46	56	19.34	55	19.22	54
26	0.15	21.26	60	21.14	59	21.01	58	20.89	57	20.77	56	20.64	55
27	0.16	22.77	61	22.65	60	22.52	59	22.40	58	22.28	57	22.15	56
28	0.17	24.36	62	24.24	61	24.11	60	23.99	59	23.86	58	23.74	57
29	0.18	26.04	62	25.91	61	25.79	60	25.66	59	25.54	58	25.41	57
30	0.19	27.80	63	27.67	62	27.55	61	27.42	60	27.30	59	27.17	58
31	0.20	29.65	64	29.53	63	29.40	62	29.28	61	29.15	60	29.03	59
32	0.21	31.59	64	31.47	63	31.34	62	31.22	61	31.09	60	30.97	59
33		33.64	65	33.51	64	33.39	63	33.26	62	33.14	61	33.01	60
34													
35													

Mean Horizontal Difference of Force of Vapor for each 0°.1 = 0.06 mm

Wet-Bulb Thermometer. t′ Centigrade Degrees.	Mean Vertical Difference for each 0°.1.	t − t′, Difference of Wet and Dry-Bulb Thermometers.											
		7°.2		7°.4		7°.6		7°.8		8°.0		8°.2	
		Force of Vapor.	Relative Humidity.	Force of Vapor.	Relative Humidity.	Force of Vapor.	Relative Humidity.	Force of Vapor.	Relative Humidity.	Force of Vapor.	Relative Humidity.	Force of Vapor.	Relative Humidity.
○	Millim.	Millim.		Millim.		Millim		Millim.		Millim.		Millim.	
0		0.32	4	0.20	3	0.09	1						
1	0.03	0.66	8	0.54	7	0.42	5	0.30	4	0.18	2	0.06	1
2	0.04	1.01	12	0.89	10	0.77	9	0.65	7	0.53	6	0.41	4
3	0.04	1.39	15	1.27	13	1.15	12	1.03	11	0.91	9	0.79	8
4	0.04	1.79	18	1.67	16	1.55	15	1.43	14	1.31	13	1.19	11
5	0.04	2.22	21	2.10	19	1.98	18	1.86	17	1.74	16	1.62	14
6	0.05	2.78	24	2.66	23	2.44	21	2.32	20	2.20	18	2.08	17
7	0.05	3.16	26	3.04	25	2.92	24	2.80	22	2.68	21	2.56	20
8	0.05	3.68	29	3.56	27	3.44	26	3.32	25	3.20	24	3.08	22
9	0.06	4.23	31	4.11	30	3.99	28	3.87	27	3.75	26	3.63	25
10	0.06	4.82	33	4.70	32	4.57	30	4.45	29	4.33	28	4.21	27
11	0.06	5.44	35	5.32	34	5.19	32	5.07	31	4.95	30	4.83	29
12	0.07	6.09	37	5.97	36	5.85	34	5.73	33	5.61	32	5.49	31
13	0.07	6.79	39	6.67	37	6.55	36	6.43	35	6.31	34	6.18	33
14	0.07	7.53	40	7.41	39	7.29	38	7.17	37	7.04	36	6.92	35
15	0.08	8.31	42	8.19	41	8.07	40	7.95	39	7.83	37	7.71	36
16	0.08	9.14	43	9.02	42	8.90	41	8.78	40	8.66	39	8.53	38
17	0.09	10.02	45	9.90	44	9.78	43	9.66	42	9.53	40	9.41	39
18	0.09	10.95	46	10.83	45	10.71	44	10.58	43	10.46	42	10.34	41
19	0.10	11.93	47	11.81	46	11.69	45	11.56	44	11.44	43	11.32	42
20	0.10	12.97	48	12.85	47	12.72	46	12.60	45	12.48	44	12.36	43
21	0.11	14.07	50	13.94	49	13.82	48	13.70	47	13.58	46	13.45	45
22	0.12	15.22	51	15.10	50	14.98	49	14.85	48	14.73	47	14.61	46
23	0.12	16.45	52	16.32	51	16.20	50	16.08	49	15.95	48	15.83	47
24	0.13	17.73	52	17.61	52	17.49	51	17.36	50	17.24	49	17.12	48
25	0.14	19.09	53	18.97	52	18.85	52	18.72	51	18.60	50	18.47	49
26	0.14	20.52	54	20.39	53	20.27	52	20.14	51	20.02	51	19.90	50
27	0.15	22.03	55	21.90	54	21.78	53	21.65	52	21.53	51	21.41	51
28	0.16	23.61	55	23.49	54	23.36	53	23.24	53	23.11	52	22.99	51
29	0.17	25.29	56	25.16	55	25.04	54	24.91	54	24.79	53	24.66	52
30	0.18	27.05	57	26.92	56	26.80	55	26.67	55	26.55	54	26.42	53
31	0.19	28.90	58	28.78	57	28.65	56	28.53	55	28.40	55	28.27	54
32	0.20	30.85	59	30.72	58	30.60	57	30.47	56	30.35	56		
33													
34													
35													

Mean Horizontal Difference of Force of Vapor for each 0°.1 = 0.06 mm.

Wet-Bulb Thermometer. t' Centigrade Degrees.	Mean Vertical Difference for each 0°.1.	$t - t'$, Difference of Wet and Dry-Bulb Thermometers.											
		8°.4		8°.6		8°.8		9°.0		9°.2		9°.4	
		Force of Vapor.	Relative Humidity.	Force of Vapor.	Relative Humidity.	Force of Vapor.	Relative Humidity.	Force of Vapor.	Relative Humidity.	Force of Vapor.	Relative Humidity.	Force of Vapor.	Relative Humidity.
o	Millim.	Millim.		Millim.		Millim.		Millim.		Millim.		Millim.	
0													
1													
2	0.04	0.30	3	0.18	2	0.06	1						
3	0.04	0.67	7	0.55	5	0.43	4	0.31	3	0.19	2	0.08	1
4	0.04	1.07	10	0.95	9	0.83	8	0.72	6	0.60	5	0.48	4
5	0.05	1.50	13	1.38	12	1.26	11	1.14	10	1.02	8	0.90	7
6	0.05	1.96	16	1.84	15	1.72	14	1.60	13	1.48	12	1.36	10
7	0.05	2.44	19	2.32	17	2.20	16	2.08	15	1.96	14	1.84	13
8	0.06	2.96	21	2.84	20	2.72	19	2.60	18	2.48	17	2.36	16
9	0.06	3.51	24	3.39	23	3.27	21	3.15	20	3.03	19	2.91	18
10	0.06	4.09	26	3.97	25	3.85	24	3.73	23	3.61	22	3.49	21
11	0.07	4.71	28	4.59	27	4.47	26	4.35	25	4.23	24	4.11	23
12	0.07	5.87	30	5.25	29	5.12	28	5.00	27	4.88	26	4.76	25
13	0.07	6.06	32	5.94	31	5.82	30	5.70	29	5.58	28	5.46	27
14	0.08	6.80	34	6.68	33	6.56	32	6.44	31	6.31	30	6.19	29
15	0.08	7.58	35	7.46	34	7.34	33	7.22	33	7.10	32	6.97	31
16	0.09	8.41	37	8.29	36	8.17	35	8.05	34	7.92	33	7.80	32
17	0.09	9.29	39	9.17	38	9.04	37	8.92	36	8.80	35	8.68	34
18	0.10	10.22	40	10.09	39	9.97	38	9.85	37	9.73	36	9.60	35
19	0.11	11.20	41	11.07	40	10.95	39	10.83	39	10.71	38	10.58	37
20	0.11	12.23	43	12.11	42	11.99	41	11.87	40	11.74	39	11.62	38
21	0.12	13.33	44	13.21	43	13.08	42	12.96	41	12.84	40	12.71	40
22	0.12	14.48	45	14.36	44	14.24	43	14.12	42	13.99	41	13.87	41
23	0.13	15.71	46	15.58	45	15.46	44	15.34	43	15.21	42	15.09	42
24	0.14	16.99	47	16.87	46	16.75	45	16.62	44	16.50	44	16.37	43
25	0.14	18.35	48	18.22	47	18.10	46	17.98	45	17.86	45	17.73	44
26	0.15	19.77	49	19.65	48	19.52	47	19.40	46	19.27	46	19.15	45
27	0.16	21.28	50	21.16	49	21.03	48	20.91	47	20.78	47	20.66	46
28	0.17	22.86	51	22.74	50	22.61	49	22.49	48	22.36	47	22.24	47
29	0.18	24.54	51	24.41	51	24.29	50	24.16	49	24.04	48	23.91	47
30	0.19	26.30	52	26.17	51	26.05	51	25.92	50	25.80	49	25.67	48
31		28.16	53	28.03	52	27.91	51	27.78	51				
32													
33													
34													
35													

Mean Horizontal Difference of Force of Vapor for each 0°.1 = 0.06 mm.

Wet-Bulb Thermometer. t' Centigrade Degrees.	Mean Vertical Difference for each 0°.1.	$t - t'$, Difference of Wet and Dry-Bulb Thermometers.											
		9°.6		9°.8		10°.0		10°.2		10°.4		10°.6	
		Force of Vapor.	Relative Humidity.	Force of Vapor.	Relative Humidity.	Force of Vapor.	Relative Humidity.	Force of Vapor.	Relative Humidity.	Force of Vapor.	Relative Humidity.	Force of Vapor.	Relative Humidity.
o	Millim.	Millim.		Millim.		Millim.		Millim.		Millim.		Millim.	
0													
1													
2													
3													
4		0.36	3	0.24	2	0.12	1						
5	0.04	0.78	6	0.66	5	0.54	4	0.42	3	0.30	2	0.18	1
6	0.05	1.24	9	1.12	8	1.00	7	0.88	6	0.76	5	0.64	5
7	0.05	1.72	12	1.60	11	1.48	10	1.36	9	1.24	8	1.12	7
8	0.05	2.24	15	2.12	14	2.00	13	1.88	12	1.76	11	1.64	10
9	0.06	2.79	17	2.66	16	2.54	16	2.42	15	2.30	14	2.18	13
10	0.06	3.37	20	3.25	19	3.13	18	3.00	17	2.88	16	2.76	15
11	0.06	3.98	22	3.86	21	3.74	20	3.62	19	3.50	18	3.38	18
12	0.07	4.64	24	4.52	23	4.40	22	4.28	22	4.15	21	4.03	20
13	0.07	5.33	26	5.21	25	5.09	25	4.97	24	4.85	23	4.73	22
14	0.07	6.07	28	5.95	27	5.83	26	5.71	25	5.58	25	5.46	24
15	0.08	6.85	30	6.73	29	6.61	28	6.49	27	6.37	26	6.24	26
16	0.08	7.68	31	7.56	31	7.44	30	7.31	29	7.19	28	7.07	27
17	0.09	8.56	33	8.43	32	8.31	31	8.19	31	8.07	30	7.94	29
18	0.09	9.48	35	9.36	34	9.24	33	9.11	32	8.99	31	8.87	30
19	0.10	10.46	36	10.34	35	10.22	34	10.09	33	9.97	33	9.85	32
20	0.11	11.50	37	11.37	36	11.25	36	11.13	35	11.01	34	10.88	33
21	0.11	12.59	39	12.47	38	12.35	37	12.22	36	12.10	35	11.98	35
22	0.12	13.75	40	13.62	39	13.50	38	13.38	37	13.25	37	13.13	36
23	0.12	14.96	41	14.84	40	14.72	39	14.59	39	14.47	38	14.35	37
24	0.13	16.25	42	16.13	41	16.00	40	15.88	40	15.76	39	15.63	38
25	0.14	17.61	43	17.48	42	17.36	42	17.24	41	17.12	40	16.99	39
26	0.14	19.02	44	18.90	43	18.78	42	18.65	42	18.53	41	18.40	40
27	0.15	20.54	45	20.41	44	20.29	43	20.16	43	20.04	42	19.91	41
28	0.16	22.12	46	22.00	45	21.87	44	21.75	44	21.62	43	21.50	42
29	0.17	23.79	47	23.66	46	23.54	45	23.41	45	23.29	44	23.16	43
30	0.18	25.55	48	25.42	47	25.30	46						
31													
32													
33													
34													
35													

Mean Horizontal Difference of Force of Vapor for each 0°.1 = 0.06 mm.

Wet-Bulb Thermometer. t′ Centigrade Degrees.	Mean Vertical Difference for each 0°.1.	t − t′, Difference of Wet and Dry-Bulb Thermometers. 10°.8		11°.0		11°.2		11°.4		11°.6		11°.8	
		Force of Vapor.	Relative Humidity.	Force of Vapor.	Relative Humidity.	Force of Vapor.	Relative Humidity.	Force of Vapor.	Relative Humidity.	Force of Vapor.	Relative Humidity.	Force of Vapor.	Relative Humidity.
°	Millim.	Millim.		Millim.		Millim.		Millim.		Millim.		Millim.	
0													
1													
2													
3													
4													
5													
6	0.05	0.52	4	0.40	3	0.28	2	0.16	1				
7	0.05	1.00	7	0.88	6	0.76	5	0.64	4	0.52	3	0.40	2
8	0.06	1.52	9	1.40	9	1.27	8	1.15	7	1.03	6	0.91	5
9	0.06	2.06	12	1.94	11	1.82	10	1.70	10	1.58	9	1.46	8
10	0.06	2.64	14	2.52	14	2.40	13	2.28	12	2.16	11	2.04	11
11	0.07	3.26	17	3.14	16	3.02	15	2.90	14	2.77	14	2.65	13
12	0.07	3.91	19	3.79	18	3.67	17	3.55	17	3.43	16	3.31	15
13	0.07	4.61	21	4.49	20	4.36	19	4.24	19	4.12	18	4.00	17
14	0.08	5.34	23	5.22	22	5.10	21	4.98	21	4.86	20	4.73	19
15	0.08	6.12	25	6.00	24	5.88	23	5.76	22	5.63	22	5.51	21
16	0.09	6.95	27	6.83	26	6.70	25	6.58	24	6.46	23	6.34	22
17	0.09	7.82	28	7.70	27	7.58	27	7.46	26	7.33	25	7.21	24
18	0.10	8.75	29	8.63	29	8.50	28	8.38	27	8.26	27	8.14	26
19	0.10	9.73	31	9.60	30	9.48	30	9.36	29	9.24	28	9.11	28
20	0.11	10.76	33	10.64	32	10.51	31	10.39	30	10.27	30	10.15	29
21	0.12	11.85	34	11.73	33	11.61	32	11.48	32	11.36	31	11.24	30
22	0.12	13.01	35	12.88	34	12.76	34	12.64	33	12.51	32	12.39	32
23	0.13	14.22	36	14.10	36	13.98	35	13.85	34	13.73	34	13.61	33
24	0.14	15.51	38	15.39	37	15.27	36	15.15	35	15.02	35	14.90	34
25	0.14	16.87	39	16.74	38	16.62	37	16.49	36	16.37	36	16.24	35
26	0.15	18.28	39	18.16	39	18.03	38	17.91	37	17.78	37	17.66	36
27	0.16	19.79	40	19.67	40	19.54	39	19.42	38	19.29	38	19.17	37
28	0.17	21.37	41	21.25	41	21.12	40	21.00	39	20.87	39	20.75	38
29		23.04	42	22.91	42								
30													
31													
32													
33													
34													
35													

Mean Horizontal Difference of Force of Vapor for each 0°.1 = 0.06 mm.

$t - t'$, Difference of Wet and Dry-Bulb Thermometers.

Wet-Bulb Thermometer. t' Centigrade Degrees.	Mean Vertical Difference for each 0°.1.	12°.0		12°.2		12°.4		12°.6		12°.8		13°.0	
		Force of Vapor.	Relative Humidity.	Force of Vapor.	Relative Humidity.	Force of Vapor.	Relative Humidity.	Force of Vapor.	Relative Humidity.	Force of Vapor.	Relative Humidity.	Force of Vapor.	Relative Humidity.
o	Millim.	Millim.		Millim.		Millim		Millim.		Millim.		Millim.	
12	0.07	3.19	14	3.06	14	2.94	13	2.82	12	2.70	12	2.58	11
13	0.07	3.88	16	3.76	16	3.64	15	3.51	14	3.39	14	3.27	13
14	0.08	4.61	18	4.49	18	4.37	17	4.25	16	4.13	16	4.00	15
15	0.08	5.39	20	5.27	20	5.15	19	5.03	18	4.90	18	4.78	17
16	0.09	6.22	22	6.09	21	5.97	21	5.85	20	5.73	19	5.61	19
17	0.09	7.09	24	6.97	23	6.84	22	6.72	22	6.60	21	6.48	21
18	0.10	8.01	25	7.89	25	7.77	24	7.65	23	7.52	23	7.40	22
19	0.10	8.99	27	8.87	26	8.74	26	8.62	25	8.50	25	8.38	24
20	0.11	10.02	28	10.90	28	9.78	27	9.65	26	9.53	26	9.41	25
21	0.12	11.12	30	10.99	29	10.87	28	10.75	28	10.62	27	10.50	27
22	0.12	12.27	31	12.14	30	12.02	30	11.90	29	11.77	28	11.65	28
23	0.13	13.48	32	13.36	31	13.23	31	13.11	30	12.99	29	12.86	29
24	0.14	14.78	33	14.65	33	14.53	32	14.40	31	14.28	31	14.16	30
25	0.14	16.11	35	15.99	34	15.87	33	15.74	33	15.62	32	15.50	31
26	0.15	17.54	36	17.42	35	17.29	34	17.17	34	17.04	33	16.92	33
27	0.16	19.04	37	18.92	36	18.80	35	18.67	35	18.55	34	18.42	34
28		20.63	38										

		13°.2		13°.4		13°.6		13°.8		14°.0			
		Millim.		Millim.		Millim.		Millim.		Millim.		Millim.	
12	0.07	2.46	10	2.34	10	2.22	9	2.09	8	1.97	8		
13	0.07	3.15	12	3.03	12	2.91	11	2.79	11	2.66	10		
14	0.08	3.88	14	3.76	14	3.64	13	3.52	13	3.40	12		
15	0.08	4.66	16	4.54	16	4.42	15	4.29	15	4.17	14		
16	0.09	5.48	18	5.36	18	5.24	17	5.12	16	5.00	16		
17	0.09	6.36	20	6.23	19	6.11	19	5.99	18	5.87	17		
18	0.10	7.28	22	7.16	21	7.03	20	6.91	20	6.79	19		
19	0.10	8.25	23	8.13	22	8.01	22	7.89	21	7.76	21		
20	0.11	9.29	25	9.16	24	9.04	23	8.92	23	8.80	22		
21	0.12	10.38	26	10.25	25	10.13	25	10.01	24	9.89	24		
22	0.12	11.53	27	11.40	27	11.28	26	11.16	26	11.03	25		
23	0.13	12.74	28	12.62	28	12.49	27	12.37	27	12.25	26		
24	0.14	14.02	30	13.90	29	13.77	29	13.65	28	13.53	27		
25	0.14	15.37	31	15.25	30	15.12	30	15.00	29	14.88	29		
26		16.80	32	16.67	31	16.55	31	16.42	30	16.30	30		

Mean Horizontal Difference of Force of Vapor for each 0°.1 = 0.06 mm.

Correction for the Barometrical Height.

For the Barometrical Height below.		Difference of Thermometers $t - t'$.													
Add.	Subtr'ct.	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°	11°	12°	13°	14°
		Wet-Bulb above the Freezing Point.													
Millim.	Millim.	Milli.	Milli.	Milli.	Milli.	Milli.	Milli.	Milli.	Milli.	Milli.	Milli.	Milli.	Milli.	Milli.	Milli.
755	755	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
750	760	0.00	0.01	0.01	0.02	0.02	0.02	0.03	0.03	0.04	0.04	0.04	0.05	0.05	0.06
745	765	0.01	0.02	0.02	0.03	0.04	0.05	0.06	0.06	0.07	0.08	0.09	0.10	0.10	0.11
740	770	0.01	0.02	0.04	0.05	0.06	0.07	0.08	0.10	0.11	0.12	0.13	0.14	0.16	0.17
735	775	0.02	0.03	0.05	0.06	0.08	0.10	0.11	0.13	0.14	0.16	0.18	0.19	0.21	0.22
730	780	0.02	0.04	0.06	0.08	0.10	0.12	0.14	0.16	0.18	0.20	0.22	0.24	0.26	0.28
725	785	0.02	0.05	0.07	0.10	0.12	0.14	0.17	0.19	0.22	0.24	0.26	0.29	0.31	0.34
720	790	0.03	0.06	0.08	0.11	0.14	0.17	0.20	0.22	0.25	0.28	0.31	0.34	0.36	0.39
715	795	0.03	0.06	0.10	0.13	0.16	0.19	0.22	0.26	0.29	0.32	0.35	0.38	0.42	0.45
710	800	0.04	0.07	0.11	0.14	0.18	0.22	0.25	0.29	0.32	0.36	0.40	0.43	0.47	0.50
700	"	0.04	0.09	0.13	0.18	0.22	0.26	0.31	0.35	0.40	0.44	0.48	0.53	0.57	0.62
690	"	0.05	0.10	0.16	0.21	0.26	0.31	0.36	0.42	0.47	0.52	0.57	0.62	0.68	0.73
680	"	0.06	0.12	0.18	0.24	0.30	0.36	0.42	0.48	0.54	0.60	0.66	0.72	0.78	0.84
670	"	0.07	0.14	0.20	0.27	0.34	0.41	0.48	0.54	0.61	0.68	0.75	0.82	0.88	0.95
660	"	0.08	0.15	0.23	0.30	0.38	0.46	0.53	0.61	0.68	0.76	0.84	0.91	0.99	1.06
650	"	0.08	0.17	0.25	0.34	0.42	0.50	0.59	0.67	0.76	0.84	0.92	1.01	1.09	1.18
		Wet-bulb below the Freezing Point.													
755	755	0.00	0.00	0.00	0.00	0.00									
750	760	0.00	0.01	0.01	0.01	0.02									
745	765	0.01	0.01	0.02	0.03	0.04									
740	770	0.01	0.02	0.03	0.04	0.05									
735	775	0.01	0.03	0.04	0.06	0.07									
730	780	0.02	0.04	0.05	0.07	0.09									
725	785	0.02	0.04	0.06	0.08	0.11									
720	790	0.02	0.05	0.07	0.10	0.12									
715	795	0.03	0.06	0.08	0.11	0.14									
710	800	0.03	0.06	0.09	0.13	0.16									
700	"	0.04	0.08	0.12	0.15	0.19									
690	"	0.05	0.09	0.14	0.18	0.23									
680	"	0.05	0.11	0.16	0.21	0.26									
670	"	0.06	0.12	0.18	0.24	0.30									
660	"	0.07	0.13	0.20	0.27	0.33									
650	"	0.07	0.15	0.22	0.29	0.36									

EXAMPLE OF CALCULATION.

Wet-bulb above the Freezing Point.

$t' = 17°.0$. $t - t' = 8°.2$. $h = 710^{mm}$.

The tables give for mean barometrical height 755^{mm}. Force of vapor . . = 9.41 mm.

Additive correction for 710^{mm}. and 8°.2 = 0.30

Force of vapor . . = 9.71

The mean barometrical pressure, at a given place, being known, it is easy to make the above Psychrometrical Tables fitted for that place, by determining, by means of this last table, a *constant correction*, to be applied to the numbers in the tables, giving the force of vapor. This correction will be found by taking for $t - t'$, or the difference of thermometers, a mean value, the deviations of which will have little influence upon the accuracy of the results.

TABLE

GIVING AT SIGHT THE RELATIVE HUMIDITY DEDUCED FROM THE INDICATIONS OF THE DEW POINT INSTRUMENTS.

By M. T. Haeghens.

This table, which has been published in the *Annuaire Météorologique de France* for 1850, page 86, and following, has been calculated by Mr. Haeghens, using Regnault's Tables of Elastic Forces of Vapor. It gives directly the *relative humidity*, when the hygrometrical observations have been made by means of dew point instruments like those of Daniell, Regnault, Bache, and others.

These hygrometers are destined to find out the temperature of *the dew point*, that is the temperature to which it would be necessary to lower the temperature of the air, in order that this air be completely saturated by the aqueous vapor which it contained at the time of the observation.

The force of vapor contained in the air, or its *absolute humidity*, is thus the maximum of force of vapor which corresponds to the temperature of the dew point; it is given directly in the Table I. of the Elastic Forces of Vapor, by Regnault.

The ratio of that maximum of force of vapor at the temperature of the dew point to the force of vapor which corresponds, in the same table, to the temperature of the surrounding air at the time of the observation, is the *relative humidity*. This ratio is given in hundredths in the following table, which relieves the observer of the trouble of calculating it.

Let t = temperature of the air surrounding the instrument.

t' = temperature of the dew point.

$t - t'$ = the difference between these two temperatures.

The first column, on the left, contains the temperature of the air t, in centigrade degrees. The following ones, headed with the differences, $t - t'$, between the temperatures of the air and of the dew point, give the *relative humidity* corresponding to the two elements.

	Temp. of the Air $= t$.	Dew point $= t'$.	Difference $t - t'$.	Relative Humidity.
Example:	10°.0	4°.4	5°.6	68

Should the temperature of the air t', or the difference $t - t'$, fall between the numbers found in the columns, it is obvious, by glancing at the table, that an interpolation at sight will always be easy.

Temperature of the air. $t =$	$t - t' =$ Difference of Temperatures of the Dew Point and of the Air.														
	0°.0	0°.2	0°.4	0°.6	0°.8	1°.0	1°.2	1°.4	1°.6	1°.8	2°.0	2°.2	2°.4	2°.6	2°.8
°															
−8	100	98	97	95	94	92	90	89	88	86	85	83	82	80	79
−7	100	98	97	95	94	92	91	89	88	86	85	83	82	81	79
−6	100	98	97	95	94	92	91	89	88	87	85	84	82	81	80
−5	100	98	97	95	94	92	91	89	88	87	85	84	82	81	80
−4	100	98	97	95	94	92	91	89	88	87	85	84	83	81	80
−3	100	98	97	95	94	92	91	90	88	87	85	84	83	81	80
−2	100	98	97	95	94	93	91	90	88	87	86	84	83	82	80
−1	100	98	97	95	94	93	91	90	89	87	86	85	83	82	81
0	100	98	97	96	94	93	91	90	89	87	86	85	83	82	81
+1	100	99	97	96	95	93	92	90	89	88	86	85	84	83	81
2	100	99	97	96	95	93	92	91	89	88	87	85	84	83	82
3	100	99	97	96	95	93	92	91	89	88	87	86	84	83	82
4	100	99	97	96	95	93	92	91	89	88	87	86	85	83	82
5	100	99	97	96	95	93	92	91	90	88	87	86	85	83	82
6	100	99	97	96	95	93	92	91	90	88	87	86	85	84	82
7	100	99	97	96	95	93	92	91	90	89	87	86	85	84	83
8	100	99	97	96	95	93	92	91	90	89	87	86	85	84	83
9	100	99	97	96	95	94	92	91	90	89	87	86	85	84	83
10	100	99	97	96	95	94	92	91	90	89	87	86	85	84	83
11	100	99	97	96	95	94	92	91	90	89	87	86	85	84	83
12	100	99	97	96	95	94	92	91	90	89	88	87	85	84	83
13	100	99	97	96	95	94	92	91	90	89	88	87	85	84	83
14	100	99	98	96	95	94	93	91	90	89	88	87	86	84	83
15	100	99	98	96	95	94	93	91	90	89	88	87	86	84	83
16	100	99	98	96	95	94	93	91	90	89	88	87	86	85	84
17	100	99	98	96	95	94	93	91	90	89	88	87	86	85	84
18	100	99	98	96	95	94	93	92	90	89	88	87	86	85	84
19	100	99	98	96	95	94	93	92	91	89	88	87	86	85	84
20	100	99	98	96	95	94	93	92	91	89	88	87	86	85	84
21	100	99	98	96	95	94	93	92	91	90	88	87	86	85	84
22	100	99	98	96	95	94	93	92	91	90	89	87	86	85	84
23	100	99	98	96	95	94	93	92	91	90	89	88	86	85	84
24	100	99	98	97	95	94	93	92	91	90	89	88	87	85	84
25	100	99	98	97	95	94	93	92	91	90	89	88	87	86	85
26	100	99	98	97	95	94	93	92	91	90	89	88	87	86	85
27	100	99	98	97	95	94	93	92	91	90	89	88	87	86	85
28	100	99	98	97	95	94	93	92	91	90	89	88	87	86	85
29	100	99	98	97	96	94	93	92	91	90	89	88	87	86	85
30	100	99	98	97	96	94	93	92	91	90	89	88	87	86	85
31	100	99	98	97	96	94	93	92	91	90	89	88	87	86	85
32	100	99	98	97	96	94	93	92	91	90	89	88	87	86	85
33	100	99	98	97	96	94	93	92	91	90	89	88	87	86	85
34	100	99	98	97	96	95	93	92	91	90	89	88	87	86	85
35	100	99	98	97	96	95	93	92	91	90	89	88	87	86	85

Temperature of the air. $t =$	$t - t' =$ Difference of Temperatures of the Dew Point and of the Air.														
	3°.0	3°.2	3.°4	3°.6	3°.8	4°.0	4°.2	4°.4	4°.6	4°.8	5°.0	5°.2	5°.4	5°.6	5°.8
°															
−8	78	77	75	74	73	72	71	69	68	67	66	65	64	63	62
−7	78	77	75	74	73	72	71	69	68	67	66	65	64	63	62
−6	78	77	76	74	73	72	71	69	68	67	66	65	64	63	62
−5	79	77	76	75	73	72	71	70	68	67	66	65	64	63	62
−4	79	77	76	75	74	73	71	70	69	68	67	66	64	63	62
−3	79	77	76	75	74	73	72	70	69	68	67	66	65	64	63
−2	79	78	77	76	74	73	72	71	70	69	68	66	65	64	63
−1	79	78	77	76	75	73	72	71	70	69	68	67	66	65	64
0	80	78	77	76	75	74	73	71	70	69	68	67	66	65	64
+1	80	79	78	77	75	74	73	72	71	70	69	68	66	65	64
2	81	79	78	77	76	75	74	72	71	70	69	68	67	66	65
3	81	80	78	77	76	75	74	73	72	71	70	69	68	66	65
4	81	80	79	78	77	75	74	73	72	71	70	69	68	67	66
5	81	80	79	78	77	76	75	73	72	71	70	69	68	67	66
6	81	80	79	78	77	76	75	74	73	72	71	70	69	68	67
7	81	80	79	78	77	76	75	74	73	72	71	70	69	68	67
8	81	80	79	78	77	76	75	74	73	72	71	70	69	68	67
8	82	80	79	78	77	76	75	74	73	72	71	70	69	68	67
10	82	81	80	78	77	76	75	74	73	72	71	70	69	68	67
11	82	81	80	79	78	76	75	74	73	72	71	70	70	69	68
12	82	81	80	79	78	77	76	75	74	73	72	71	70	69	68
13	82	81	80	79	78	77	76	75	74	73	72	71	70	69	68
14	82	81	80	79	78	77	76	75	74	73	72	71	70	69	68
15	82	81	80	79	78	77	76	75	74	73	72	71	70	69	68
16	82	81	80	79	78	77	76	75	74	73	72	71	71	70	69
17	83	81	80	79	78	77	76	75	74	73	73	72	71	70	69
18	83	82	81	80	79	78	77	76	75	74	73	72	71	70	69
19	83	82	81	80	79	78	77	76	75	74	73	72	71	70	69
20	83	82	81	80	79	78	77	76	75	74	73	72	71	70	69
21	83	82	81	80	79	78	77	76	75	74	73	72	71	70	70
22	83	82	81	80	79	78	77	76	75	74	73	73	72	71	70
23	83	82	81	80	79	78	77	76	75	74	74	73	72	71	70
24	83	82	81	80	79	78	77	77	76	75	74	73	72	71	70
25	84	83	82	81	80	79	78	77	76	75	74	73	72	71	70
26	84	83	82	81	80	79	78	77	76	75	74	73	72	71	70
27	84	83	82	81	80	79	78	77	76	75	74	73	72	71	70
28	84	83	82	81	80	79	78	77	76	75	74	73	72	71	70
29	84	83	82	81	80	79	78	77	76	75	75	74	73	72	71
30	84	83	82	81	80	79	78	77	76	76	75	74	73	72	71
31	84	83	82	81	80	79	78	77	77	76	75	74	73	72	71
32	84	83	82	81	80	79	79	78	77	76	75	74	73	72	72
33	84	83	82	81	80	80	79	78	77	76	75	74	73	72	72
34	85	84	83	82	81	80	79	78	77	76	75	74	74	73	72
35	85	84	83	82	81	80	79	78	77	76	75	75	74	73	72

Temperature of the air. t =	t − t′ = Difference of Temperatures of the Dew Point and of the Air.														
	6°.0	6°.2	6°.4	6°.6	6°.8	7°.0	7°.2	7°.4	7°.6	7°.8	8°.0	8°.2	8°.4	8°.6	8°.8
o															
−8															
−7															
−6	61	60	59	58	57	56									
−5	61	60	59	58	58	57	56	55	54	53	52				
−4	62	61	60	59	58	57	56	55	54	53	52				
−3	62	61	60	59	58	57	56	55	54	53	53	52	51	50	49
−2	62	61	60	60	59	58	57	56	55	54	53	52	51	50	49
−1	63	62	61	60	59	58	57	56	55	54	53	52	51	50	49
−0	63	62	61	60	59	58	57	56	55	54	53	53	52	51	50
+1	63	62	61	61	60	58	58	57	56	55	54	53	52	51	51
2	64	63	62	61	60	59	58	57	56	55	55	54	53	52	51
3	64	63	62	62	60	60	59	58	57	56	55	54	53	53	52
4	65	64	63	62	61	60	59	58	57	56	56	55	54	53	52
5	65	64	63	62	62	61	60	59	58	57	56	55	54	54	53
6	66	65	64	63	62	61	60	59	58	57	57	56	55	54	53
7	66	65	64	63	62	61	60	60	59	58	57	56	55	55	54
8	66	65	64	63	62	62	61	60	59	58	57	56	56	55	54
9	66	65	64	64	63	62	61	60	59	58	58	57	56	55	54
10	67	66	65	64	63	62	61	60	59	59	58	57	56	55	55
11	67	66	65	64	63	62	61	61	60	59	58	57	56	56	55
12	67	66	65	64	63	62	62	61	60	59	58	57	57	56	55
13	67	66	65	64	64	63	62	61	60	59	59	58	57	56	55
14	67	66	66	65	64	63	62	61	60	60	59	58	57	56	56
15	67	67	66	65	64	63	62	61	61	60	59	58	57	57	56
16	68	67	66	65	64	63	63	62	61	60	59	58	58	57	56
17	68	67	66	65	64	64	63	62	61	60	59	59	58	57	56
18	68	67	66	65	65	64	63	62	61	60	60	59	58	57	57
19	68	67	67	66	65	64	63	62	62	61	60	59	58	58	57
20	68	68	67	66	65	64	63	63	62	61	60	59	59	58	57
21	69	68	67	66	65	64	64	63	62	61	60	60	59	58	57
22	69	68	67	66	65	65	64	63	62	61	61	60	59	58	58
23	69	68	67	67	66	65	64	63	62	62	61	60	59	59	58
24	69	68	68	67	66	65	64	63	63	62	61	60	60	59	58
25	69	69	68	67	66	65	64	64	63	62	61	61	60	59	58
26	70	69	68	67	66	65	65	64	63	62	61	61	60	59	58
27	70	69	68	67	66	66	65	64	63	62	62	61	60	59	59
28	70	69	68	67	67	66	65	64	63	63	62	61	60	60	59
29	70	69	69	68	67	66	65	64	64	63	62	61	61	60	59
30	70	69	69	68	67	66	65	65	64	63	62	62	61	60	59
31	70	70	69	68	67	66	66	65	64	63	62	62	61	60	60
32	71	70	69	68	67	67	66	65	64	64	63	62	61	61	60
33	71	70	69	68	68	67	66	65	64	64	63	62	61	61	60
34	71	70	69	69	68	67	66	66	65	64	63	62	62	61	60
35	71	70	70	69	68	67	66	66	65	64	63	63	62	61	60

Temperature of the air. $t =$	$t - t' =$ Difference of Temperatures of the Dew Point and of the Air.														
	9°.0	9°.2	9°.4	9°.6	9°.8	10°.0	10°.2	10°.4	10°.6	10°.8	11°.0	11°.2	11°.4	11°.6	11°.8
°															
−8															
−7															
−6															
−5															
−4															
−3															
−2															
−1															
0															
+1	50														
2	50	49	49	48	47	46									
3	51	50	49	48	48	47	46	45	45	44	43				
4	51	51	50	49	48	47	47	46	45	44	44	43	42	42	41
5	52	51	50	49	49	48	47	46	46	45	44	43	43	42	41
6	52	52	51	50	49	48	48	47	46	45	45	44	43	43	42
7	53	52	51	51	50	49	48	47	47	46	45	45	44	43	42
8	53	52	52	51	50	49	49	48	47	46	46	45	44	44	43
9	54	53	52	51	50	50	49	48	48	47	46	45	45	44	43
10	54	53	52	51	51	50	49	49	48	47	47	46	45	44	44
11	54	53	53	52	51	50	50	49	48	48	47	46	46	45	44
12	54	54	53	52	51	51	50	49	49	48	47	47	46	45	45
13	55	54	53	52	52	51	50	50	49	48	47	47	46	46	45
14	55	54	53	53	52	51	50	50	49	48	48	47	46	46	45
15	55	54	54	53	52	51	51	50	49	49	48	47	47	46	45
16	55	55	54	53	52	52	51	50	50	49	48	48	47	46	46
17	56	55	54	53	53	52	51	51	50	49	49	48	47	47	46
18	56	55	54	54	53	52	51	51	50	49	49	48	47	47	46
19	56	55	55	54	53	52	52	51	50	50	49	48	48	47	47
20	56	56	55	54	53	53	52	51	51	50	49	49	48	47	47
21	57	56	55	54	54	53	52	52	51	50	50	49	48	48	47
22	57	56	55	55	54	53	53	52	51	50	50	49	49	48	47
23	57	56	56	55	54	53	53	52	51	51	50	49	49	48	48
24	57	57	56	55	54	54	53	52	52	51	50	50	49	48	48
25	58	57	56	55	55	54	53	53	52	51	51	50	49	49	48
26	58	57	56	56	55	54	53	53	52	51	51	50	50	49	48
27	58	57	56	56	55	54	54	53	52	52	51	50	50	49	48
28	58	57	57	56	55	55	54	53	53	52	51	51	50	49	49
29	58	58	57	56	56	55	54	53	53	52	52	51	50	50	49
30	59	58	57	57	56	55	54	54	53	52	52	51	51	50	49
31	59	58	57	57	56	55	55	54	53	53	52	51	51	50	49
32	59	58	58	57	56	56	55	54	54	53	52	52	51	50	50
33	59	59	58	57	56	56	55	54	54	53	52	52	51	51	50
34	60	59	58	57	57	56	55	55	54	53	53	52	52	51	50
35	60	59	58	58	57	56	56	55	54	54	53	52	52	51	50

Temperature of the air. $t =$	$t - t' =$ Difference of Temperatures of the Dew Point and of the Air.														
	12°.0	12°.2	12°.4	12°.6	12°.8	13°.0	13°.2	13°.4	13°.6	13°.8	14°.0	14°.2	14°.4	14°.6	14°.8
°															
−8															
−7															
−6															
−5															
−4															
−3															
−2															
−1															
0															
+1															
2															
3															
4	40	40	39	38	38	37									
5	41	40	39	39	38	38	37	36	36	35	35				
6	41	41	40	39	39	38	37	37	36	36	35	35	34	33	33
7	42	41	40	40	39	39	38	37	37	36	36	35	34	34	33
8	42	42	41	40	40	39	38	38	37	37	36	35	35	34	34
9	43	42	41	41	40	40	39	38	38	37	37	36	35	35	34
10	43	43	42	41	41	40	39	39	38	38	37	36	36	35	35
11	44	43	42	42	41	40	40	39	39	38	37	37	36	36	35
12	44	43	43	42	41	41	40	40	39	38	38	37	37	36	36
13	44	44	43	42	42	41	41	40	39	39	38	38	37	37	36
14	45	44	43	43	42	42	41	40	40	39	39	38	37	37	36
15	45	44	44	43	42	42	41	41	40	39	39	38	38	37	37
16	45	44	44	43	43	42	41	41	40	40	39	39	38	38	37
17	45	45	44	43	43	42	42	41	41	40	39	39	38	38	37
18	46	45	44	44	43	43	42	41	41	40	40	39	39	38	38
19	46	45	45	44	43	43	42	42	41	41	40	39	39	38	38
20	46	45	45	44	44	43	42	42	41	41	40	40	39	39	38
21	46	46	45	45	44	43	43	42	42	41	41	40	39	39	38
22	47	46	45	45	44	44	43	43	42	41	41	40	40	39	39
23	47	46	46	45	45	44	43	43	42	42	41	41	40	39	39
24	47	47	46	45	45	44	44	43	42	42	41	41	40	40	39
25	47	47	46	46	45	44	44	43	43	42	42	41	41	40	39
26	48	47	46	46	45	45	44	44	43	42	42	41	41	40	40
27	48	47	47	46	45	45	44	44	43	43	42	42	41	40	40
28	48	48	47	46	46	45	45	44	44	43	42	42	41	41	40
29	48	48	47	47	46	45	45	44	44	43	43	42	42	41	41
30	49	48	47	47	46	46	45	45	44	43	43	42	42	41	41
31	49	48	48	47	46	46	45	45	44	44	43	43	42	42	41
32	49	49	48	47	47	46	46	45	45	44	43	43	42	42	41
33	49	49	48	48	47	46	46	45	45	44	44	43	43	42	42
34	50	49	49	48	47	47	46	46	45	44	44	43	43	42	42
35	50	49	49	48	48	47	46	46	45	44	44	44	43	43	42

TABLE

FOR

DEDUCING THE RELATIVE HUMIDITY IN HUNDREDTHS, FROM THE INDICATIONS OF SAUSSURE'S HAIR-HYGROMETER;

Calculated from the Experiments of Melloni.

By M. T. Haeghens.

The Hair-Hygrometer of Saussure having been formerly used for long series of observations, and being still employed by some meteorologists, notwithstanding the imperfection of this instrument, on account of its giving directly the relative humidity without calculation, it was desirable to ascertain the correspondence of the degrees of this hygrometer with the relative humidity expressed in hundredths, as in the preceding table. Though these instruments compared with each other, show very often great discrepancies in their indications, yet a large number of them agree sufficiently well with the experiments of Melloni, August, and others, to allow the following table of comparison to be constructed, which table may be considered as giving good approximations. For the calculation of it, Mr. Haeghens used the results of Melloni, which agree also satisfactorily with a series of observations very carefully made by M. Delcros. See *Annuaire Météorologique de France.*

RELATIVE HUMIDITY IN HUNDREDTHS.

Degrees of Saussure's Hygrometer. Tens.	Degrees of Saussure's Hygrometer. Units.									
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**
	Humidity	Humidity	Humidity	Humidity	Humidity	Humidity	Humidity	Humidity	Humidity	Humidity
0	0	0	1	1	2	3	3	4	4	5
1	5	6	6	7	8	8	9	10	11	11
2	12	12	13	14	15	16	17	18	18	19
3	19	20	21	22	23	24	24	25	26	26
4	27	27	28	28	29	30	31	32	33	34
5	35	36	37	37	38	39	40	41	42	43
6	44	45	46	47	49	50	51	52	53	55
7	56	57	58	59	61	62	63	65	66	68
8	69	70	72	73	75	77	78	79	81	82
9	83	85	87	88	90	91	93	95	97	98
10	100	.	.	.	.	.	.	.	.	.

APPENDIX

TO

THE HYGROMETRICAL TABLES.

TABLES

FOR

COMPARING THE QUANTITIES OF RAIN-WATER.

The three kinds of measures which are most in use for noting the quantities of rain and melted snow, are the Centimetres and Millimetres in France, the Paris or French inches and lines in Germany, and the English inches and decimals in England, America, and also in Russia, the Russian foot being the same as the English foot. The following tables will facilitate the comparison of these various measures with each other.

A glance at the tables will show that the first column on the left contains the numbers to be converted, and the heads of the following columns the fractions of these numbers, or units, each of which is one tenth of those in the first column. Shorter tables, at the bottom, give, when necessary, the value of proportional parts still smaller than those found in the larger tables.

Example.

Let 13 Centimetres be converted into French inches and lines.

Take, in Table II., the line beginning with 10 Centimetres in the first column, follow that line as far as the column headed 3 Centimetres, and there will be found the number of 4 inches 9.63 lines, which is the corresponding value in French inches of 10 + 3, or 13 Centimetres.

If the number is followed by a fraction, as for instance, 13.5 Centimetres, or 135 Millimetres, we find, —

			French Inches.	Lines.
In the larger table	13	Centimetres =	4	.9,63
In the smaller table at the bottom	5	Millimetres =		.2,216
Or	13.5	Centimetres =		4.11,846

When the measures which are to be compared are both subdivided into decimal parts, the equivalents of the numbers greater than 9.9 may be found by moving the decimal point.

Example.

Let 346.7 Centimetres be converted into English inches.

In Table I., in the column headed 4, on the fourth line, we find 3.4 Centimetres = 1.3386 English inches.

Moving the decimal point by two places we have 340 Centimetres = 133.86 English inches.

Then, in the column headed 7, on the line beginning with 6, we find 6.7 Centimetres = 2.64

Making together 346.7 Centimetres = 136.50 English inches.

1 Centimetre = 0.39371 English Inch.

Centimetres.	Millimetres. 0.	1.	2.	3.	4.	5.	6.	7.	8.	9.
	Eng.Inch.	Eng.Inch.	Eng.Inch.	Eng.Inch.	Eng.Inch.	Eng.Inch.	Eng.Inch.	Eng.Inch.	Eng.Inch.	Eng.Inch.
0	0.0000	0.0394	0.0787	0.1181	0.1575	0.1969	0.2362	0.2756	0.3150	0.3543
1	0.3937	0.4331	0.4725	0.5118	0.5512	0.5906	0.6299	0.6693	0.7087	0.7480
2	0.7874	0.8268	0.8662	0.9055	0.9449	0.9843	1.0236	1.0630	1.1023	1.1418
3	1.1811	1.2205	1.2599	1.2992	1.3386	1.3780	1.4174	1.4567	1.4961	1.5355
4	1.5748	1.6142	1.6536	1.6930	1.7323	1.7717	1.8111	1.8504	1.8898	1.9292
5	1.9686	2.0079	2.0473	2.0867	2.1260	2.1654	2.2048	2.2441	2.2835	2.3229
6	2.3623	2.4016	2.4410	2.4804	2.5197	2.5591	2.5985	2.6379	2.6772	2.7166
7	2.7560	2.7953	2.8347	2.8741	2.9135	2.9528	2.9922	3.0316	3.0709	3.1103
8	3.1497	3.1891	3.2284	3.2678	3.3072	3.3465	3.3859	3.4253	3.4646	3.5040
9	3.5434	3.5828	3.6221	3.6615	3.7009	3.7402	3.7796	3.8190	3.8584	3.8977

II. CONVERSION OF CENTIMETRES INTO FRENCH INCHES, LINES, AND DECIMALS.

1 Centimetre = 0. inches 4.43296 Paris lines.

Centimetres.	Units. 0.	1.	2.	3.	4.	5.	6.	7.	8.	9.
	Fr.In. Lin.	Fr.In. Lin.	Fr.In. Lin.	Fr.In. Lin.	Fr.In. Lin.	Fr.In. Lin.	Fr.In. Lin.	Fr.In. Lin.	Fr.In. Lin.	Fr.In. Lin.
0	0. 0,00	0. 4,43	0. 8,87	1. 1,30	1. 5,73	1.10,16	2. 2,60	2. 7,03	2.11,46	3. 3,90
10	3. 8,33	4. 0,76	4. 5,20	4. 9,63	5. 2,06	5. 6,50	5.10,93	6. 3,36	6. 7,79	7. 0,23
20	7. 4,66	7. 9,09	8. 1,53	8. 5,96	8.10,39	9. 2,82	9. 7,26	9.11,69	10. 4,12	10. 8,56
30	11. 0,99	11. 5,42	11. 9,85	12. 2,29	12. 6,72	12.11,15	13. 3,59	13. 8,02	14. 0,45	14. 4,89
40	14. 9,32	15. 1,75	15. 6,18	15.10,62	16. 3,05	16. 7,48	16.11,92	17. 4,35	17. 8,78	18. 1,22
50	18. 5,65	18.10,08	19. 2,51	19. 6,95	19.11,38	20. 3,81	20. 8,25	21. 0,68	21. 5,11	21. 9,54
60	22. 1,98	22. 6,41	22.10,84	23. 3,28	23. 7,71	24. 0,14	24. 4,58	24.11,01	25. 1,44	25. 5,87
70	25.10,31	26. 2,74	26. 7,17	26.11,61	27. 4,04	27. 8,47	28. 0,90	28. 5,34	28.11,77	29. 2,20
80	29. 6,64	29.11,07	30. 3,50	30. 7,94	31. 0,37	31. 4,80	31. 9,23	32. 1,67	32. 6,10	32.10,53
90	33. 2,97	33. 7,40	33.11,83	34. 4,27	34. 8,70	35. 1,13	35. 5,56	35.10,00	36. 2,43	36. 6,86
	Centim.	Fr.In. Lin.	Centim.	Fr.In. Lin.	Centim.	Fr.In. Lin.	Centim.	Fr.In. Lin.	Centim.	Fr.In. Lin.
	100	36.11,30	200	73.10.59	300	110.9,89	400	147.9,18	500	184.8,48

CONVERSION OF CENTIMETRES INTO FRENCH LINES AND DECIMALS.

Centimetres.	Units. 0.	1.	2.	3.	4.	5.	6.	7.	8.	9.
	Fr. Lines.	Fr. Lines.	Fr. Lines.	Fr. Lines.	Fr. Lines.	Fr. Lines.	Fr. Lines.	Fr. Lines.	Fr. Lines.	Fr. Lines.
0	0.00	4.43	8.87	13.30	17.73	22.16	26.60	31.03	35.46	39.90
10	44.33	48.76	53.20	57.63	62.06	66.50	70 93	75.36	79.79	84.23
20	88.66	93.09	97.53	101.96	106.39	110.82	115.26	119.69	124.12	128.56
30	132.99	137.42	141.85	146.29	150.72	155.15	159.59	164.02	168.45	172.89
40	177.32	181.75	186.18	190.62	195.05	199.48	203.92	208.35	212.78	217.22
50	221.65	226.08	230.51	234.95	239.38	243.81	248.25	252.68	257.11	261.54
60	265.98	270.41	274.84	279.28	283.71	288.14	292.58	297.01	301.44	305.87
70	310.31	314.74	319.17	323.61	328.04	328.47	336.90	341.34	345.77	350.20
80	354.64	359.07	363.50	367.94	372.37	376.80	381.23	385.67	390.10	394.53
90	398.97	403.40	407.83	412.27	416.70	421.13	425.56	430.00	434.43	438.86

CONVERSION OF MILLIMETRES INTO FRENCH LINES AND DECIMALS.

	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.
	Fr. Lines.	Fr. Lines.	Fr. Lines.	Fr. Lines.	Fr. Lines.	Fr. Lines.	Fr. Lines.	Fr. Lines.	Fr. Lines.	Fr. Lines.
	0.0	0.443	0.887	1.330	1.773	2.216	2.660	3.103	3.546	3.990

1 English Inch = 2.53995 Centimetres.

English Inches.	Units.									
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**
	Centim.	Centim.	Centim.	Centim.	Centim.	Centim.	Centim.	Centim.	Centim.	Centim.
0	0.00	2.54	5.08	7.62	10.16	12.70	15.24	17.78	20.32	22.86
10	25.40	27.94	30.48	33.02	35.56	38.10	40.64	43.18	45.72	48.26
20	50.80	53.34	55.88	58.42	60.96	63.54	66.08	68.62	71.16	73.70
30	76.20	78.74	81.28	83.82	86.36	88.90	91.44	93.98	96.52	99.06
40	101.60	104.14	106.68	109.22	111.76	114.30	116.84	119.38	121.92	124.46
50	127.00	129.54	132.08	134.62	137.16	139.70	142.24	144.78	147.32	149.86
60	152.40	154.94	157.48	160.02	162.56	165.10	167.64	170.18	172.72	175.26
70	177.80	180.34	182.88	185.42	187.96	190.50	193.04	195.58	198.12	200.66
80	203.20	205.74	208.28	210.82	213.36	215.90	218.44	220.98	223.52	226.06
90	228.60	231.14	233.68	236.22	238.76	241.30	243.84	246.38	248.92	251.46
100	254.00	256.53	259.07	261.61	264.15	266.69	269.23	271.77	274.31	276.85
110	279.39	281.93	284.47	287.01	289.55	292.09	294.63	297.17	299.71	302.25
120	304.79	307.33	309.87	312.41	314.95	317.49	320.03	322.57	325.11	327.65
130	330.19	332.73	335.27	337.81	340.35	342.89	345.43	347.97	350.51	353.05
140	355.59	358.13	360.67	363.21	365.75	368.29	370.83	373.37	375.91	378.45
150	380.99	383.53	386.07	388.61	391.15	393.69	396.23	398.77	401.31	403.85
160	406.39	408.93	411.47	414.01	416.55	419.09	421.63	424.17	426.71	429.25
170	431.79	434.33	436.87	439.41	441.95	444.49	447.03	449.57	452.11	454.65
180	457.19	459.73	462.27	464.81	467.35	469.89	472.43	474.97	477.51	480.05
190	482.59	485.13	487.67	490.21	492.75	495.29	497.83	500.37	502.91	505.45
200	507.99	510.53	513.07	515.11	518.15	520.69	523.23	525.77	528.31	530.85

	Tenths of an Inch.									
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**
	Centim.	Centim.	Centim.	Centim.	Centim.	Centim.	Centim.	Centim.	Centim.	Centim.
	0.000	0.254	0.508	0.762	1.016	1.270	1.524	1.778	2.032	2.286

IV. CONVERSION OF ENGLISH INCHES INTO FRENCH INCHES AND LINES.

I English Inch = 0. inches 11.2595 Paris lines.

Eng. Inches.	Units.									
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**
	Fr.In. Lin.	Fr.In. Lin.	Fr.In. Lin.	Fr.In. Lin.	Fr.In. Lin.	Fr.In. Lin.	Fr.In. Lin.	Fr.In. Lin.	Fr.In. Lin.	Fr.In. Lin.
0	0. 0,00	0.11,26	1.10,52	2. 9,78	3. 9,04	4. 8,30	5. 7,56	6. 6,82	7. 6,08	8. 5,34
10	9. 4,59	10. 3,85	11. 3,11	12. 2,37	13. 1,63	14. 0,89	15. 0,15	15.11,41	16.10,67	17. 9,93
20	18. 9,19	19. 8,45	20. 7,71	21. 6,97	22. 6,23	23. 5,49	24. 4,75	25. 4,01	26. 3,27	27. 2,53
30	28. 1,78	29. 1,04	30. 0,30	30.11,56	31.10,82	32.10,08	33. 9,34	34. 8,60	35. 7,86	36. 7,12
40	37. 6,38	38. 5,64	39. 4,90	40. 4,16	41. 3,42	42. 2,68	43. 1,94	44. 1,20	45. 0,46	45.11,72
50	46.10,97	47.10,23	48. 9,49	49. 8,75	50. 8,01	51. 7,27	52. 6,53	53. 5,79	54. 5,05	55. 4,31
60	56. 3,57	57. 2,83	58. 2,09	59. 1,35	60. 0,61	60.11,87	61.11,13	62.10,39	63. 9,65	64. 8,91
70	65. 8,16	66. 7,42	67. 6,68	68. 5,94	69. 5,20	70. 4,46	71. 3,72	72. 2,98	73. 2,24	74. 1,50
80	75. 0,76	76. 0,02	76.11,28	77.10,54	78. 9,80	79. 9,06	80. 8,32	81. 7,58	82. 6,84	83. 6,10
90	84. 5,35	85. 4,61	86. 3,87	87. 3,13	88. 2,39	89. 1,65	90. 0,91	91. 0,17	91.11,43	92.10,69

Eng. Inch.	Fr.In. Lin.	Eng. Inch.	Fr.In. Lin.	Eng. Inch.	Fr.In. Lin.	Eng. Inch.	Fr.In. Lin.	Eng. Inch.	Fr.In. Lin.
100	93.9,95	200	187.7,90	300	281.5,85	400	375.3,80	500	469.1,75

	Tenths of an Inch.									
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**
	Fr.In. Lin.	Fr.In. Lin.	Fr.In. Lin.	Fr.In. Lin.	Fr.In. Lin.	Fr.In. Lin.	Fr.In. Lin.	Fr.In. Lin.	Fr.In. Lin.	Fr.In. Lin.
	0.0,00	0.1,13	0.2,25	0.3,38	0.4,50	0.5,63	0.6,76	0.7,88	0.9,01	0.10,13

1 French Inch = 2.7070 Centimetres.

French Inches.	Units.									
	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.
	Centim.	Centim.	Centim.	Centim.	Centim.	Centim.	Centim.	Centim.	Centim.	Centim.
0	0.00	2.71	5.41	8.12	10.83	13.53	16.24	18.95	21.66	24.36
10	27.07	29.78	32.48	35.19	37.90	40.60	43.31	46.02	48.73	51.43
20	54.14	56.85	59.55	62.26	64.97	67.67	70.38	73.09	75.80	78.50
30	81.21	83.92	86.62	89.33	92.04	94.74	97.45	100.16	102.87	105.57
40	108.28	110.99	113.69	116.40	119.11	121.81	124.52	127.23	129.94	132.64
50	135.35	138.06	140.76	143.47	146.18	148.88	151.59	154.30	157.01	159.71
60	162.42	165.13	167.83	170.54	172.25	175.95	178.66	181.37	184.08	186.78
70	189.49	192.20	194.90	197.61	200.32	203.02	205.73	208.44	211.15	213.86
80	216.56	219.27	221.97	224.68	227.39	230.09	232.80	235.51	238.22	240.92
90	243.63	246.34	249.04	251.75	254.46	257.16	259.87	262.58	265.28	267.99
100	270.70	273.41	276.11	278.82	281.53	284.23	286.94	289.65	292.36	295.06
110	297.77	300.48	303.18	305.89	308.60	311.30	314.01	316.72	319.42	322.13
120	324.84	327.55	330.25	332.96	335.67	338.37	341.08	343.79	346.49	349.20
130	351.91	354.62	357.32	360.03	362.74	365.44	368.15	370.86	373.56	376.27
140	378.98	381.69	384.39	387.10	389.81	392.51	395.22	397.93	400.63	403.34
150	406.05	408.76	411.46	414.17	416.88	419.58	422.29	425.00	427.70	430.41
160	433.12	435.83	438.53	441.24	443.95	446.65	449.36	452.07	454.77	457.48
170	460.19	462.90	465.60	468.31	471.02	473.72	476.43	479.14	481.84	484.55
180	487.26	489.97	492.67	495.38	498.09	500.79	503.50	516.21	508.91	511.62
190	514.33	517.04	519.74	522.45	525.16	527.86	530.57	533.28	535.98	538.69
200	541.40	544.11	546.81	549.52	552.23	554.93	557.64	560.35	563.05	565.76

CONVERSION OF FRENCH LINES INTO CENTIMETRES.

1 French Line = 0.22558 Centimetre.

French Lines.	Tenths of a Line.									
	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.
	Centim.	Centim.	Centim.	Centim.	Centim.	Centim.	Centim.	Centim.	Centim.	Centim.
0	0.000	0.023	0.045	0.068	0.090	0.113	0.135	0.158	0.180	0.203
1	0.226	0.248	0.271	0.293	0.316	0.338	0.361	0.383	0.406	0.429
2	0.451	0.474	0.496	0.519	0.541	0.564	0.586	0.609	0.632	0.654
3	0.677	0.699	0.722	0.744	0.767	0.790	0.812	0.835	0.857	0.880
4	0.902	0.925	0.947	0.970	0.992	1.015	1.038	1.060	1.083	1.105
5	1.128	1.150	1.173	1.196	1.218	1.241	1.263	1.286	1.308	1.331
6	1.353	1.376	1.399	1.421	1.444	1.466	1.489	1.511	1.534	1.557
7	1.579	1.602	1.624	1.647	1.669	1.692	1.714	1.737	1.760	1.782
8	1.805	1.827	1.850	1.872	1.895	1.917	1.940	1.963	1.985	2.008
9	2.030	2.053	2.075	2.098	2.120	2.143	2.166	2.188	2.211	2.233
10	2.256	2.278	2.301	2.323	2.346	2.369	2.391	2.414	2.436	2.459
11	2.481	2.504	2.527	2.549	2.572	2.594	2.617	2.639	2.662	2.684
12	2.707	2.730	2.752	2.775	2.797	2.820	2.842	2.865	2.887	2.910

1 French Inch = 1.065768 English Inch.

French Inches.	Units.									
	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.
	Eng.Inch.	Eng.Inch.	Eng.Inch.	Eng.Inch	Eng.Inch	Eng.Inch.	Eng.Inch.	Eng.Inch	Eng.Inch.	Eng.Inch.
0	0.000	1.066	2.132	3.197	4.263	5.329	6.395	7.460	8.526	9.592
10	10.658	11.723	12.789	13.855	14.921	15.987	17.052	18.118	19.184	20.250
20	21.315	22.381	23.447	24.513	25.578	26.644	27.710	28.776	29.842	30.907
30	31.973	33.039	34.105	35.170	36.236	37.302	38.368	39.433	40.499	41.565
40	42.631	43.696	44.762	45.828	46.894	47.960	49.025	50.091	51.157	52.223
50	53.288	54.354	55.420	56.486	57.552	58.617	59.683	60.749	61.815	62.880
60	63.946	65.012	66.078	67.144	68.209	69.275	70.341	71.407	72.472	73.538
70	74.604	75.670	76.635	77.801	78.867	79.933	80.999	82.064	83.130	84.196
80	85.261	86.327	87.393	88.459	89.525	90.590	91.656	92.722	93.788	94.854
90	95.919	96.985	98.051	99.116	100.182	101.248	102.314	103.379	104.445	105.511
100	106.577	107.643	108.708	109.774	110.840	111.906	112.971	114.037	115.103	116.169
110	117.234	118.300	119.366	120.432	121.498	122.563	123.629	124.695	125.761	126.826
120	127.892	128.958	130.024	131.089	132.155	133.221	134.287	135.353	136.418	137.484
130	138.550	139.616	140.681	141.747	142.813	143.879	144.944	146.010	147.076	148.142
140	149.208	150.273	151.339	152.405	153.471	154.536	155.602	156.668	157.734	158.799
150	159.865	160.931	161.997	163.063	164.128	165.194	166.260	167.326	168.391	169.457
160	170.523	171.589	172.654	173.720	174.786	175.852	176.917	177.983	179.049	180.115
170	181.181	182.246	183.312	184.378	185.444	186.509	187.575	188.641	189.707	190.772
180	191.838	192.904	193.970	195.036	196.101	197.167	198.233	199.299	200.364	201.430
190	202.496	203.562	204.627	205.693	206.759	207.825	208.891	209.956	211.022	212.088
200	213.154	214.219	215.285	216.351	217.417	218.482	219.548	220.614	221.680	222.746

CONVERSION OF FRENCH LINES INTO ENGLISH INCHES.

1 French Line = 0,088814 English Inch.

French Lines.	Tenths of a Line.									
	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.
	Eng.Inch.	Eng.Inch.	Eng.Inch.	Eng.Inch.	Eng.Inch.	Eng.Inch	Eng.Inch.	Eng Inch.	Eng Inch.	Eng.Inch.
0	0.0000	0.0089	0.0178	0.0266	0.0355	0.0444	0.0533	0.0622	0.0711	0.0799
1	0.0888	0.0977	0.1066	0.1155	0.1243	0.1332	0.1421	0.1510	0.1599	0.1687
2	0.1776	0.1865	0.1954	0.2043	0.2131	0.2220	0.2309	0.2398	0.2487	0.2576
3	0.2664	0.2753	0.2842	0.2931	0.3020	0.3108	0.3197	0.3286	0.3375	0.3464
4	0.3553	0.3641	0.3730	0.3819	0.3908	0.3997	0.4085	0.4174	0.4263	0.4352
5	0.4441	0.4530	0.4618	0.4707	0.4796	0.4885	0.4974	0.5062	0.5151	0.5240
6	0.5329	0.5418	0.5506	0.5595	0.5684	0.5773	0.5862	0.5951	0.6039	0.6128
7	0.6217	0.6306	0.6483	0.6572	0.6661	0.6750	0.6839	0.6927	0.7016	0.7105
8	0.7105	0.7194	0.7283	0.7372	0.7460	0.7549	0.7638	0.7727	0.7816	0.7904
9	0.7993	0.8082	0.8171	0.8260	0.8349	0.8437	0.8526	0.8615	0.8704	0.8792
10	0.8881	0.8970	0.9059	0.9148	0.9237	0.9325	0.9414	0.9503	0.9592	0.9681
11	0.9770	0.9858	0.9947	1.0036	1.0125	1.0214	1.0302	1.0391	1.0480	1.0569
12	1.0658	1.0746	1.0835	1.0924	1.1013	1.1018	1.1191	1.1279	1.1368	1.1457

METEOROLOGICAL TABLES.

III.

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COMPARISON

OF

THE BAROMETRICAL SCALES.

The following tables are intended for converting into each other the three most important Barometrical Scales. They are sufficiently detailed to save the labor of any calculation or even of interpolation for the ordinary wants of Meterology. But before making use of them, for comparing the observations taken with barometers of different scales, it is necessary to reduce the observed heights to the temperature of the freezing point, or to any other temperature, provided it be the same for all, by means of the tables calculated for this purpose, and which will be found below. The reason of it may be readily understood.

The length of the bars of metal, or of other substances, which represent the standard measures of length which obtain among different nations, varying with the temperature, it was necessary to determine a fixed point of temperature at which they really ought to have the length adopted as the standard unit of measure. This temperature is the *normal* temperature of the standard, and the length of the standard-bar, at this temperature, is the *true* length of it.

If the normal temperature of the various standards used for dividing Barometrical Scales were the same, the heights of the barometrical column, taken with these scales, could be compared directly, provided the scales be made of the same substance, brass, for instance, because their variations above or below this normal temperature would remain parallel with each other. But unfortunately it is not so. The standard length of the English yard has been taken at 62° Fahrenheit; that of the Old French standard, at 13° Reaumur; that of the Metre at the freezing point or zero Centigrade. Thus metallic rods intended to represent these various units of measure give the true or standard length only when at these respective temperatures; at any other temperature they are longer or shorter than the standard, and their subdivisions, inches, lines, or millimeters partake of the error.

It is obvious, therefore, that the barometrical heights, taken with different scales, cannot be compared directly by means of the following tables, which give the relation between these scales at their respective *normal* temperatures. For suppose the temperature of the three barometers to be the freezing point, or 32° Fahrenheit,

the scale of the Metrical Barometer alone will actually represent the standard length, and the millimeters will have the true length; while the inches and lines of the Old French and of the English Barometers will be too short, causing thus the barometrical column to appear too high. If the temperature of the instruments be 62° Fahrenheit, the divisions of the English Barometer will have the true standard length, and those of the Old French Barometer nearly so; but the millimeters of the Metrical Barometer will be too long, causing the barometrical column to appear too low. It is to neutralize the effect of those unequalities arising from the expansion of the scale, that it is necessary before comparing the observations taken with the three barometers to reduce them to the same temperature. This is done by means of the tables above mentioned, for reducing the barometer to the freezing point, which suppose the scales to be of brass from top to bottom, and which take into account the expansion or contraction they undergo by the variations of temperature.

But in doing so, we must be aware that the accuracy of the comparison depends in part upon the correctness of the indications of the attached thermometers, which determine the amount of the correction to be applied for reducing the barometers to the freezing point. If the thermometers do not agree, an error is introduced which will affect the height of the reduced columns, and the final comparison. Therefore the correction of the attached thermometers ought to be ascertained and applied to them before the reduction is made; or if this correction is unknown, it will be well to place the instruments to be compared in the most favorable conditions for taking the same temperature, and then to take the temperature given by *one* of the thermometers to reduce both barometers. If the correction of the attached thermometer has not been applied before the reduction, it will be contained, *after* the reduction, in the total correction of the instrument. If it be so, this circumstance must be indicated.

I.

COMPARISON

OF ENGLISH AND METRICAL BAROMETERS.

TABLE

FOR

CONVERTING ENGLISH INCHES AND DECIMALS INTO MILLIMETRES,

GIVING IMMEDIATELY IN MILLIMETRES THE VALUES CORRESPONDING TO EVERY TENTH OF AN INCH FROM 9 TO 18 INCHES, AND TO EVERY HUNDREDTH OF AN INCH FROM 19 TO 31.5 INCHES.

1 English Inch = 25.3995 Millimetres.

English Inches.	Tenths of an Inch.									
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**
	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.
9	228.60	231.14	233.68	236.22	238.76	241.30	243.84	246.38	248.92	251.46
10	254.00	256.53	259.07	261.61	264.15	266.69	269.23	271.77	274.31	276.85
11	279.39	281.93	284.47	287.01	289.55	292.09	294.63	297.17	299.71	302.25
12	304.79	307.33	309.87	312.41	314.95	317.49	320.03	322.57	325.11	327.65
13	330.19	332.73	335.27	337.81	340.35	342.89	345.43	347.97	350.51	353.05
14	355.59	358.13	360.67	363.21	365.75	368.29	370.83	373.37	375.91	378.45
15	380.99	383.53	386.07	388.61	391.15	393.69	396.23	398.77	401.31	403.85
16	406.39	408.93	411.47	414.01	416.55	419.09	421.63	424.17	426.71	429.25
17	431.79	434.33	436.87	439.41	441.95	444.49	447.03	449.57	452.11	454.65
18	457.19	459.73	462.27	464.81	467.35	469.89	472.43	474.97	477.51	480.05

English Inches and tenths.	Hundredths of an Inch.									
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**
	Millim.	Millim.	Millim.	Millim.	Millim	Millim.	Millim.	Millim.	Millim.	Millim.
19.0	482.59	482.84	483.10	483.35	483.61	483.86	484.11	484.37	484.62	484.88
1	485.13	485.38	485.64	485.89	486.15	486.40	486.65	486.91	487.16	487.42
2	487.67	487.92	488.18	488.43	488.69	488.94	489.19	489.45	489.70	489.96
3	490.21	490.46	490.72	490.97	491.23	491.48	491.73	491.99	492.24	492.50
4	492.75	493.00	493.26	493.51	493.77	494.02	494.27	494.53	494.77	495.04
5	495.29	495.54	495.80	496.05	496.31	496.56	496.81	497.07	497.32	497.58
6	497.83	498.08	498.34	498.59	498.84	499.10	499.35	499.61	499.86	500.12
7	500.37	500.62	500.88	501.13	501.39	501.64	501.89	502.15	502.40	502.66
8	502.91	503.16	503.42	503.67	503.93	504.18	504.43	504.69	504.94	505.20
9	505.45	505.70	505.96	506.21	506.47	506.72	506.97	507.23	507.48	507.74
20.0	507.99	508.24	508.50	508.75	509.01	509.26	509.51	509.77	510.02	510.28
1	510.53	510.78	511.04	511.29	511.55	511.80	512.05	512.31	512.56	512.82
2	513.07	513.32	513.58	513.83	514.09	514.34	514.59	514.85	515.10	515.36
3	515.61	515.86	516.12	516.37	516.63	516.88	517.13	517.39	517.64	517.90
4	518.15	518.40	518.66	518.91	519.17	519.42	519.67	519.93	520.18	520.44
5	520.69	520.94	521.20	521.45	521.71	521.96	522.21	522.47	522.72	522.98
6	523.23	523.48	523.74	523.99	524.25	524.50	524.75	525.01	525.26	525.52
7	525.77	526.02	526.28	526.53	526.79	527.04	527.29	527.55	527.80	528.06
8	528.31	528.56	528.82	529.07	529.33	529.58	529.83	530.09	530.34	530.60
9	530.85	531.10	531.36	531.61	531.87	532.12	532.37	532.63	532.83	533.14

Thousandths of an Inch.

0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**
0.0	0.03	0.05	0.08	0.10	0.13	0.15	0.18	0.20	0.23

Inches and tenths.	Hundredths of an Inch.									
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**
	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.
21.0	533.39	533.64	533.90	534.15	534.41	534.66	534.91	535.17	535.42	535.68
1	535.93	536.18	536.44	536.69	536.95	537.20	537.45	537.71	537.96	538.22
2	538.47	538.72	538.98	539.23	539.49	539.74	539.99	540.25	540.50	540.76
3	541.01	541.26	541.52	541.77	542.03	542.28	542.53	542.79	543.04	543.30
4	543.55	543.80	544.06	544.31	544.57	544.82	545.07	545.33	545.58	545.84
5	546.09	546.34	546.60	546.85	547.11	547.36	547.61	547.87	548.12	548.38
6	548.63	548.88	549.14	549.39	549.65	549.90	550.15	550.41	550.66	550.92
7	551.17	551.42	551.68	551.93	552.19	552.44	552.69	552.95	553.20	553.46
8	553.71	553.96	554.22	554.47	554.73	554.98	555.23	555.49	555.74	556.00
9	556.25	556.50	556.76	557.01	557.27	557.52	557.77	558.03	558.28	558.54
22.0	558.79	559.04	559.30	559.55	559.81	560.06	560.31	560.57	560.82	561.08
1	561.33	561.58	561.84	562.09	562.35	562.60	562.85	563.11	563.36	563.62
2	563.87	564.12	564.38	564.63	564.89	565.14	565.39	565.65	565.90	566.16
3	566.41	566.66	566.92	567.17	567.43	567.68	567.93	568.19	568.44	568.70
4	568.95	569.20	569.46	569.71	569.97	570.22	570.47	570.73	570.98	571.24
5	571.49	571.74	572.00	572.25	572.51	572.76	573.01	573.27	573.52	573.78
6	574.03	574.28	574.54	574.79	575.05	575.30	575.55	575.81	576.06	576.32
7	576.57	576.82	577.08	577.33	577.59	577.84	578.09	578.35	578.60	578.86
8	579.11	579.36	579.62	579.87	580.13	580.38	580.63	580.89	581.14	581.40
9	581.65	581.90	582.16	582.41	582.67	582.92	583.17	583.43	583.68	583.94
23.0	584.19	584.44	584.70	584.95	585.21	585.46	585.71	585.97	586.22	586.48
1	586.73	586.98	587.24	587.49	587.75	588.00	588.25	588.51	588.76	589.02
2	589.27	589.52	589.78	590.03	590.29	590.54	590.79	591.05	591.30	591.56
3	591.81	592.06	592.32	592.57	592.83	593.08	593.33	593.59	593.84	594.10
4	594.35	594.60	594.86	595.11	595.37	595.62	595.87	596.13	596.38	596.64
5	596.89	597.14	597.40	597.65	597.91	598.16	598.41	598.67	598.92	599.18
6	599.43	599.68	599.94	600.19	600.45	600.70	600.95	601.21	601.46	601.72
7	601.97	602.22	602.48	602.73	602.99	603.24	603.49	603.75	604.00	604.26
8	604.51	604.76	605.02	605.27	605.53	605.78	606.03	606.29	606.54	606.80
9	607.05	607.30	607.56	607.81	608.07	608.32	608.57	608.83	609.08	609.34
24.0	609.59	609.84	610.10	610.35	610.61	610.86	611.11	611.37	611.62	611.88
1	612.13	612.38	612.64	612.89	613.15	613.40	613.65	613.91	614.16	614.42
2	614.67	614.92	615.18	615.43	615.69	615.94	616.19	616.45	616.70	616.96
3	617.21	617.46	617.72	617.97	618.23	618.48	618.73	618.99	619.24	619.50
4	619.75	620.00	620.26	620.51	620.77	621.02	621.27	621.53	621.78	621.04

Thousandths of an Inch.

0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**
0.0	0.03	0.05	0.08	0.10	0.13	0.15	0.18	0.20	0.23

Inches and tenths.	Hundredths of an Inch.									
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**
	Millim	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.
24.5	622.29	622.54	622.80	623.05	623.31	623.56	623.81	624.07	624.32	624.58
6	624.83	625.08	625.34	625.59	625.85	626.10	626.34	626.61	626.86	627.12
7	627.37	627.62	627.88	628.13	628.39	628.64	628.89	629.15	629.40	629.66
8	629.91	630.16	630.42	630.67	630.93	631.18	631.43	631.69	631.94	632.20
9	632.45	632.70	632.96	633.21	633.47	633.72	633.97	634.23	634.48	634.74
25.0	634.99	635.24	635.50	637.75	636.01	636.26	636.51	636.77	637.02	637.28
1	637.53	637.78	638.04	638.29	638.55	638.80	639.05	639.31	639.56	639.82
2	640.07	640.32	640.58	640.83	641.09	641.34	641.59	641.85	642.10	642.36
3	642.61	642.86	643.12	643.37	643.63	643.88	644.13	644.39	644.64	644.90
4	645.15	645.40	645.66	645.91	646.17	646.42	646.67	646.93	647.18	647.44
5	647.69	647.94	648.20	648.45	648.71	648.96	649.21	649.47	649.72	649.98
6	650.23	650.48	650.74	650.99	651.25	651.50	651.75	652.01	652.26	652.52
7	652.77	653.02	653.28	653.53	653.79	654.04	654.29	654.55	654.80	655.06
8	655.31	655.56	655.82	656.07	656.33	656.58	656.83	657.09	657.34	657.60
9	657.85	658.10	658.36	658.61	658.87	659.12	659.37	659.63	659.88	660.14
26.0	660.39	660.64	660.90	661.15	661.41	661.66	661.91	662.17	662.42	662.68
1	662.93	663.18	663.44	663.69	663.95	664.20	664.45	664.71	664.96	665.22
2	665.47	665.72	665.98	666.23	666.49	666.74	666.99	667.25	667.50	667.76
3	668.01	668.26	668.52	668.77	669.03	669.28	669.53	669.79	670.04	670.30
4	670.55	670.80	671.06	671.31	671.57	671.82	672.07	672.33	672.58	672.84
5	673.09	673.34	673.60	673.85	674.11	674.36	674.41	674.87	675.12	675 38
6	675.63	675.88	676.14	676.39	676.65	676.90	677.15	677.41	677.66	677.92
7	678.17	678.42	678.68	678.93	679.19	679.44	679.69	679.95	680.20	680.46
8	680.71	680.96	681.22	681.47	681.73	681.98	682.23	682.49	682.74	683.00
9	683.25	683.50	683.76	684.01	684.27	684.52	684.77	685.03	685.28	685.54
27.0	685.79	686.04	686.30	686.55	686.81	687.06	687.31	687.57	687.82	688.08
1	688.33	688.38	688.84	689.09	689.35	689.60	689.85	690.11	690.36	690.62
2	690.87	691.12	691.38	691.63	691.89	692.14	692.39	692.65	692.90	693.16
3	693.41	693.66	693.92	694.17	694.43	694.68	694.93	695.19	695.44	695.70
4	695.95	696.20	696.46	696.71	696.97	697.22	697.47	697.73	697.98	698.24
5	698.49	698.74	699.00	699.25	699.51	699.76	700.01	700.27	700.52	700.78
6	701.03	701.28	701.54	701.79	702.05	702.30	702.55	702.81	703.06	703.32
7	703.57	703.82	704.08	704.33	704.59	704.84	705.09	705.35	705.60	705.86
8	706.11	706.36	706.62	706.87	707.13	707.38	707.63	707.89	708.14	708.40
9	708.65	708.90	709.16	709.41	709.67	709.92	710.17	710.43	710.68	710.94

Thousandths of an Inch.									
0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**
0.0	0.03	0.05	0.08	0.10	0.13	0.15	0.18	0.20	0.23

Inches and tenths.	Hundredths of an Inch.									
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**
	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.
28.0	711.19	711.44	711.70	711.95	712.21	712.46	712.71	712.97	713.22	713.48
1	713.73	713.98	714.24	714.49	714.75	715.00	715.25	715.51	715.76	716.02
2	716.27	716.52	716.78	717.03	717.29	717.54	717.79	718.05	718.30	718.56
3	718.81	719.06	719.32	719.57	719.83	720.08	720.33	720.59	720.84	721.10
4	721.35	721.60	721.86	722.11	722.37	722.62	722.87	723.13	723.38	723.64
5	723.89	724.14	724.40	724.65	724.91	725.16	725.41	725.67	725.92	726.18
6	726.43	726.68	726.94	727.19	727.45	727.70	727.95	728.21	728.46	728.72
7	728.97	729.22	729.48	729.73	729.99	730.24	730.49	730.75	731.00	731.26
8	731.51	731.76	732.02	732.27	732.53	732.78	733.03	733.29	733.54	732.80
9	734.05	734.30	734.56	734.81	735.07	735.32	735.57	735.83	736.08	736.34
29.0	736.59	736.84	737.10	737.35	737.61	737.86	738.11	738.37	738.62	738.88
1	739.13	739.38	739.64	739.89	740.15	740.40	740.65	740.91	740.16	741.42
2	741.67	741.92	742.18	742.43	742.69	742.94	743.19	743.45	743.70	743.96
3	744.21	744.46	744.72	744.97	745.23	745.48	745.73	745.99	746.24	746.50
4	746.75	747.00	747.26	747.51	747.77	748.02	748.27	748.53	748.78	749.04
5	749.29	749.54	749.80	750.05	750.31	750.56	750.81	751.07	751.32	751.58
6	751.83	752.08	752.34	752.59	752.85	753.10	753.35	753.61	753.86	754.12
7	754.37	754.62	754.88	755.13	755.39	755.64	755.89	756.15	756.40	756.66
8	756.91	757.16	757.42	757.67	757.93	758.18	758.43	758.69	758.94	759.20
9	759.45	759.70	759.96	760.21	760.47	760.72	760.97	761.23	761.48	761.74
30.0	761.99	762.24	762.50	762.75	763.01	763.26	763.51	763.77	764.02	764.28
1	764.53	764.78	765.04	765.29	765.55	765.80	766.05	766.31	766.56	766.82
2	767.07	767.32	767.58	767.83	768.09	768.34	768.59	768.85	769.10	769.36
3	769.61	769.86	770.12	770.37	770.63	770.88	771.13	771.39	771.64	771.90
4	772.15	772.40	772.66	772.91	773.17	773.42	773.67	773.93	774.18	774.44
5	774.69	774.94	778.20	775.45	775.71	775.96	776.21	776.47	776.72	776.98
6	777.23	777.48	777.74	777.99	778.25	778.50	778.75	779.01	779.26	779.52
7	779.77	780.02	780.28	780.53	780.79	781.04	781.29	781.55	781.80	782.06
8	782.31	782.56	782.82	783.07	783.33	783.58	783.83	784.09	784.34	784.60
9	784.85	785.10	785.36	785.61	785.87	786.12	786.37	786.63	786.88	787.14
31.0	787.39	787.64	787.90	788.15	788.41	788.66	788.91	789.17	789.42	789.68
1	789.93	790.18	790.44	790.69	790.95	791.20	791.45	791.71	791.96	792.22
2	792.47	792.72	792.98	793.23	793.49	793.74	793.99	794.25	794.50	794.76
3	795.01	795.26	795.52	795.77	796.03	796.28	796.53	796.79	797.04	797.30
4	797.55	797.80	798.06	798.31	798.57	798.82	799.07	799.33	799.58	799.84

Thousandths of an Inch.

0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**
0.0	0.03	0.05	0.08	0.10	0.13	0.15	0.18	0.20	0.23

II.

COMPARISON

OF METRICAL AND ENGLISH BAROMETERS.

TABLE

FOR

CONVERTING MILLIMETRES INTO ENGLISH INCHES AND DECIMALS.

GIVING IMMEDIATELY THE VALUES CORRESPONDING TO EACH MILLIMETRE FROM 400 TO 600 MILLIMETRES, AND TO EACH TENTH OF A MILLIMETRE FROM 600 TO 800 MILLIMETRES.

1 Metre = 39.37079 inches.

Millim.	Eng. Inch.	Millim.	Eng. Inch.	Millim.	Eng. Inch.	Millim.	Eng. Inch.	Millim.	Eng. Inch.
400	15.748	440	17.323	480	18.898	520	20.473	560	22.048
401	.788	441	.362	481	.937	521	.512	561	.087
402	.827	442	.402	482	.977	522	.551	562	.126
403	.866	443	.441	483	19.016	523	.591	563	.166
404	.906	444	.480	484	.055	524	.630	564	.205
405	15.945	445	17.520	485	19.095	525	20.670	565	22.244
406	.985	446	.559	486	.134	526	.709	566	.284
407	16.024	447	.598	487	.173	527	.748	567	.323
408	.063	448	.638	488	.213	528	.788	568	.363
409	.103	449	.677	489	.252	529	.827	569	.402
410	16.142	450	17.717	490	19.292	530	20.867	570	22.441
411	.181	451	.756	491	.331	531	.906	571	.481
412	.221	452	.795	492	.370	532	.945	572	.520
413	.260	453	.835	493	.410	533	.985	573	.559
414	.299	454	.874	494	.449	534	21.024	574	.599
415	16.339	455	17.914	495	19.489	535	21.063	575	22.638
416	.378	456	.953	496	.528	536	.103	576	.678
417	.418	457	.992	497	.567	537	.142	577	.717
418	.457	458	18.032	498	.607	538	.181	578	.756
419	.496	459	.071	499	.646	539	.221	579	.796
420	16.536	460	18.111	500	19.685	540	21.260	580	22.835
421	.575	461	.150	501	.725	541	.300	581	.875
422	.614	462	.189	502	.764	542	.339	582	.914
423	.654	463	.229	503	.803	543	.378	583	.953
424	.693	464	.268	504	.843	544	.417	584	.993
425	16.733	465	18.308	505	19.882	545	21.457	585	23.032
426	.772	466	.347	506	.921	546	.496	586	.071
427	.811	467	.386	507	.961	547	.536	587	.111
428	.851	468	.426	508	20.000	548	.575	588	.150
429	.890	469	.465	509	.040	549	.614	589	.189
430	16.929	470	18.504	510	20.079	550	21.654	590	23.229
431	.969	471	.544	511	.118	551	.693	591	.268
432	17.008	472	.583	512	.158	552	.733	592	.308
433	.047	473	.622	513	.197	553	.772	593	.347
434	.087	474	.662	514	.236	554	.811	594	.386
435	17.126	475	18.701	515	20.276	555	21.851	595	23.426
436	.166	476	.740	516	.315	556	.890	596	.465
437	.205	477	.780	517	.354	557	.930	597	.504
438	.244	478	.819	518	.394	558	.969	598	.544
439	.284	479	.858	519	.433	559	22.009	599	.583

Milli-metres.	Tenths of Millimetres.									
	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.
	Eng. In.	Eng. In.	Eng. In.	Eng. In.	Eng. In.	Eng. In.	Eng. In.	Eng. In.	Eng. In.	Eng. In.
600	23.622	23.626	23.630	23.634	23.638	23.642	23.646	23.650	23.654	23.658
601	.662	.666	.670	.674	.678	.682	.685	.689	.693	.697
602	.701	.705	.709	.713	.717	.721	.725	.729	.733	.737
603	.741	.745	.748	.752	.756	.760	.764	.768	.772	.776
604	.780	.784	.788	.792	.796	.800	.804	.807	.811	.815
605	23.819	23.823	23.827	23.831	23.835	23.839	23.843	23.847	23.851	23.855
606	.859	.863	.867	.871	.874	.878	.882	.886	.890	.894
607	.898	.902	.906	.910	.914	.918	.922	.926	.930	.934
608	.937	.941	.945	.949	.953	.957	.961	.965	.969	.973
609	.977	.981	.985	.989	.992	.996	24.000	24.004	24.008	24.012
610	24.016	24.020	24.024	24.028	24.032	24.036	24.040	24.044	24.048	24.052
611	.056	.060	.063	.067	.071	.075	.079	.083	.087	.091
612	.095	.099	.103	.107	.111	.115	.119	.122	.126	.130
613	.134	.138	.142	.146	.150	.154	.158	.162	.166	.170
614	.174	.178	.182	.185	.189	.193	.197	.201	.205	.209
615	24.213	24.217	24.221	24.225	24.229	24.233	24.237	24.241	24.244	24.248
616	.252	.256	.260	.264	.268	.272	.276	.280	.284	.288
617	.292	.296	.300	.303	.307	.311	.315	.319	.323	.327
618	.331	.335	.339	.343	.347	.351	.355	.359	.363	.367
619	.371	.374	.378	.382	.386	.390	.394	.398	.402	.406
620	24.410	24.414	24.418	24.422	24.426	24.430	24.434	24.437	24.441	24.445
621	.449	.453	.457	.461	.465	.469	.473	.477	.481	.485
622	.489	.493	.496	.500	.504	.508	.512	.516	.520	.524
623	.528	.532	.536	.540	.544	.548	.552	.556	.559	.563
624	.567	.571	.575	.579	.583	.587	.591	.595	.599	.603
625	24.607	24.611	24.615	24.618	24.622	24.626	24.630	24.634	24.638	24.642
626	.646	.650	.654	.658	.662	.666	.670	.674	.677	.681
627	.685	.689	.693	.697	.701	.705	.709	.713	.717	.721
628	.725	.729	.733	.736	.740	.744	.748	.752	.756	.760
629	.764	.768	.772	.776	.780	.784	.788	.792	.796	.800
630	24.804	24.808	24.811	24.815	24.819	24.823	24.827	24.831	24.835	24.839
631	.843	.847	.851	.855	.859	.863	.867	.870	.874	.878
632	.882	.886	.890	.894	.898	.902	.906	.910	.914	.918
633	.922	.926	.930	.934	.937	.941	.945	.949	.953	.957
634	.961	.965	.969	.973	.977	.981	.985	.989	.993	.997
635	25.000	25.004	25.008	25.012	25.016	25.020	25.024	25.028	25.032	25.036
636	.040	.044	048	.052	.056	.059	.063	.067	.071	.075
637	.079	.083	087	.091	.095	.099	.103	.107	.111	.115
638	.118	.122	126	.130	.134	.138	.142	.146	.150	.154
639	.158	.162	166	.170	.174	.177	.181	.185	.189	.193
	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.

Milli-metres.	Tenths of Millimetres.									
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**
	Eng. In.	Eng. In.	Eng. In.	Eng. In.	Eng. In.	Eng. In.	Eng. In.	Eng. In.	Eng. In.	Eng. In.
640	25.197	25.201	25.205	25.209	25.213	25.217	25.221	25.225	25.229	25.233
641	.237	.241	.245	.249	.252	.256	.260	.264	.268	.272
642	.276	.280	.284	.288	.292	.296	.300	.304	.308	.311
643	.315	.319	.323	.327	.331	.335	.339	.343	.347	.351
644	.355	.359	.363	.367	.371	.374	.378	.382	.386	.390
645	25.394	25 398	25.402	25.406	25.410	25.414	25.418	25.422	25.426	25.430
646	.433	.437	.441	.445	.449	.453	.457	.461	.465	.469
647	.473	.477	.481	.485	.489	.492	.496	.500	.504	.508
648	.512	.516	.520	.524	.528	.532	.536	.540	.544	.548
649	.552	.556	.559	.563	.567	.571	.575	.579	.583	.587
650	25.591	25.595	25.599	25.603	25.607	25.611	25.614	25.618	25.622	25.626
651	.630	.634	.738	.642	.646	.650	.654	.658	.662	.666
652	.670	.674	.678	.682	.685	.689	.693	.697	.701	.705
653	.709	.713	.717	.721	.725	.729	.733	.737	.741	.745
654	.748	.752	.756	.760	.764	.768	.772	.776	.780	.784
655	25.788	25.792	25.796	25.800	25.804	25.808	25.812	25.815	25.819	25.823
656	.827	.831	.835	.839	.843	.847	.851	.855	.859	.863
657	.867	.871	.874	.878	.882	.886	.890	.894	.898	.902
658	.906	.910	.914	.918	.922	.926	.930	.934	.937	.941
659	.945	.949	.953	.957	.961	.965	.969	.973	.977	.981
660	25.985	25.989	25.993	25.997	26.000	26.004	26.008	26.012	26.016	26.020
661	26.024	26.028	26.032	26.036	26.040	.044	.048	.052	.056	.059
662	.063	.067	.071	.075	.079	.083	.087	.091	.095	.099
663	.103	.107	.111	.115	.119	.122	.126	.130	.134	.138
664	.142	.146	.150	.154	.158	.162	.166	.170	.174	.178
665	26.181	26.185	26.189	26.193	26.197	26 201	26.205	26.209	26.213	26.217
666	.221	.225	.229	.233	.237	.241	.245	.248	.252	.256
667	.260	.264	.268	.272	.276	.280	.284	.288	.292	.296
668	.300	.304	.308	.312	.316	.319	.323	.327	.331	.334
669	.339	.343	.347	.351	.355	.359	.363	.367	.371	.374
670	26.378	26.382	26.386	26 390	26.394	26.398	26.402	26.406	26.410	26.414
671	.418	.422	.426	.430	.434	.438	.441	.445	.449	.453
672	.457	.461	.465	.469	.473	.477	.481	.485	.489	.493
673	.496	.500	.504	.508	.512	.516	.520	.524	.528	.532
674	.536	.540	.544	.548	.552	.556	.559	.563	.567	.571
675	26 575	26.579	26.583	26.587	26.591	26.595	26.599	26.603	26.607	26.611
676	.615	.619	.622	.626	.630	.634	.638	.642	.646	.650
677	.654	.658	.662	.666	.670	.674	.678	.682	.685	.689
678	.693	.697	.701	.705	.709	.713	.717	.721	.725	.729
679	.733	.737	.741	.745	.748	.752	.756	.760	.764	.768
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**

Milli-metres.	Tenths of Millimetres.									
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**
	Eng. In.	Eng. In.	Eng. In.	Eng. In.	Eng. In.	Eng. In.	Eng. In.	Eng. In.	Eng. In.	Eng. In.
680	26.772	26.776	26.780	26.784	26.788	26.792	26.796	26.800	26.804	26.808
681	.811	.815	.819	.823	.827	.831	.835	.839	.843	.847
682	.851	.855	.859	.863	.867	.870	.874	.878	.882	.886
683	.890	.894	.898	.902	.906	.910	.914	.918	.922	.926
684	.930	.933	.937	.941	.945	.949	.953	.957	.961	.965
685	26.969	26.973	26.977	26.981	26.985	26.988	26.992	26.996	27.000	27.004
686	27.008	27.012	27.016	27.020	27.024	27.028	27.032	27.036	.040	.044
687	.048	.052	.056	.059	.063	.067	.071	.075	.079	.083
688	.087	.091	.095	.099	.103	.107	.111	.115	.119	.122
689	.126	.130	.134	.138	.142	.146	.150	.154	.158	.162
690	27.166	27.170	27.174	27.178	27.182	27.185	27.189	27.193	27.197	27.201
691	.205	.209	.213	.217	.221	.225	.229	.233	.237	.241
692	.245	.249	.252	.256	.260	.264	.268	.272	.276	.280
693	.284	.288	.292	.296	.300	.304	.308	.312	.315	.319
694	.323	.327	.331	.335	.339	.343	.347	.351	.355	.359
695	27.363	27.367	27.371	27.375	27.378	27.382	27.386	27.390	27.394	27.398
696	.402	.406	.410	.414	.418	.422	.426	.430	.434	.438
697	.441	.445	.449	.453	.457	.461	.465	.469	.473	.477
698	.481	.485	.489	.493	.497	.500	.504	.508	.512	.516
699	.520	.524	.528	.532	.536	.540	.544	.548	.552	.556
700	27.559	27.563	27.567	27.571	27.575	27.579	27.583	27.587	27.591	27.595
701	.599	.603	.606	.610	.614	.618	.622	.626	.630	.634
702	.638	.642	.646	.650	.654	.658	.662	.666	.669	.673
703	.677	.681	.685	.689	.693	.697	.701	.705	.709	.713
704	.717	.721	.725	.728	.732	.736	.740	.744	.748	.752
705	27.756	27.760	27.764	27.768	27.772	27.776	27.780	27.784	27.788	27.791
706	.795	.799	.803	.807	.811	.815	.819	.823	.827	.831
707	.835	.839	.843	.847	.851	.855	.859	.862	.866	.870
708	.874	.878	.882	.886	.890	.894	.898	.902	.906	.910
709	.914	.918	.922	.925	.929	.933	.937	.941	.945	.949
710	27.953	27.957	27.961	27.965	27.969	27.973	27.977	27.980	27.984	27.988
711	.992	.996	28.000	28.004	28.008	28.012	28.016	28.020	28.024	28.028
712	28.032	28.036	.040	.043	.047	.051	.055	.059	.063	.067
713	.071	.075	.079	.083	.087	.091	.095	.099	.103	.106
714	.110	.114	.118	.122	.126	.130	.134	.138	.142	.146
715	28.150	28.154	28.158	28.162	28.166	28.169	28.173	28.177	28.181	28.185
716	.189	.193	.197	.201	.205	.209	.213	.217	.221	.225
717	.229	.233	.237	.240	.244	.248	.252	.256	.260	.264
718	.268	.272	.276	.280	.284	.288	.292	.296	.300	.303
719	.307	.311	.315	.319	.323	.327	.331	.335	.339	.343
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**

Milli-metres.	Tenths of Millimetres.									
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**
	Eng. In.	Eng. In.	Eng. In.	Eng. In.	Eng. In.	Eng. In.	Eng. In.	Eng. In.	Eng. In.	Eng. In.
720	28.347	28.351	28.354	28.358	28.362	28.366	28.370	28.374	28.378	28.382
721	.386	.390	.394	.398	.402	.406	.410	.414	.417	.421
722	.425	.429	.433	.437	.441	.445	.449	.453	.457	.461
723	.465	.469	.473	.477	.480	.484	.488	.492	.496	.500
724	.504	.508	.512	.516	.520	.524	.528	.532	.536	.540
725	28.543	28.547	28.551	28.555	28.559	28.563	28.567	28.571	28.575	28.579
726	.583	.587	.591	.595	.599	.603	.606	.610	.614	.618
727	.622	.626	.630	.634	.638	.642	.646	.650	.654	.658
728	.662	.666	.669	.673	.677	.681	.685	.689	.693	.697
729	.701	.705	.709	.713	.717	.721	.725	.729	.732	.736
730	28.740	28.744	28.748	28.752	28.756	28.760	28.764	28.768	28.772	28.776
731	.780	.784	.788	.792	.795	.799	.803	.807	.811	.815
732	.819	.823	.827	.831	.835	.839	.843	.847	.851	.855
733	.858	.862	.866	.870	.874	.878	.882	.886	.890	.894
734	.898	.902	.906	.910	.914	.917	.921	.925	.929	.933
735	28.937	28.941	28.945	28.949	28.953	28.957	28.961	28.965	28.969	28.973
736	.977	.980	.984	.988	.992	.996	29.000	29.004	29.008	29.012
737	29.016	29.020	29.024	29.028	29.032	29.036	.040	.043	.047	.051
738	.055	.059	.063	.067	.071	.075	.079	.083	.087	.091
739	.095	.099	.103	.106	.110	.114	.118	.122	.126	.130
740	29.134	29.138	29.142	29.146	29.150	29.154	29.158	29.162	29.166	29.169
741	.173	.177	.181	.185	.189	.193	.197	.201	.205	.209
742	.213	.217	.221	.225	.229	.232	.236	.240	.244	.248
743	.252	.256	.260	.264	.268	.272	.276	.280	.284	.288
744	.292	.295	.299	.303	.307	.311	.315	.319	.323	.327
745	29.331	29.335	29.339	29.343	29.347	29.351	29.355	29.358	29.362	29.366
746	.370	.374	.378	.382	.386	.390	.394	.398	.402	.406
747	.410	.414	.418	.421	.425	.429	.433	.437	.441	.445
748	.449	.453	.457	.461	.465	.469	.473	.477	.481	.484
749	.488	.492	.496	.500	.504	.508	.512	.516	.520	.524
750	29.528	29.532	29.536	29.540	29.543	29.547	29.551	29.555	29.559	29.563
751	.567	.571	.575	.579	.583	.587	.591	.595	.599	.603
752	.606	.610	.614	.618	.622	.626	.630	.634	.638	.642
753	.646	.650	.654	.658	.662	.666	.669	.673	.677	.681
754	.685	.689	.693	.697	.701	.705	.709	.713	.717	.721
755	29.725	29.729	29.732	29.736	29.740	29.744	29.748	29.752	29.756	29.760
756	.764	.768	.772	.776	.780	.784	.788	.792	.795	.799
757	.803	.807	.811	.815	.819	.823	.827	.831	.835	.839
758	.843	.847	.851	.855	.858	.862	.866	.870	.874	.878
759	.882	.886	.890	.894	.898	.902	.906	.910	.914	.918
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**

Millimetres.	Tenths of Millimetres.									
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**
	Eng. In.	Eng. In.	Eng. In.	Eng. In.	Eng. In.	Eng. In.	Eng. In.	Eng. In.	Eng. In.	Eng. In.
760	29.921	29.925	29.929	29.933	29.937	29.941	29.945	29.949	29.953	29.957
761	.961	.965	.969	.973	.977	.981	.984	.988	.992	.996
762	30.000	30.004	30.008	30.012	30.016	30.020	30.024	30.028	30.032	30.036
763	.040	.044	.048	.051	.055	.059	.063	.067	.071	.075
764	.079	.083	.087	.091	.095	.099	.103	.107	.110	.114
765	30.118	30.122	30.126	30.130	30.134	30.138	30.142	30.146	30.150	30.154
766	.158	.162	.166	.170	.173	.177	.181	.185	.189	.193
767	.197	.201	.205	.209	.213	.217	.221	.225	.229	.233
768	.236	.240	.244	.248	.252	.256	.260	.264	.268	.272
769	.276	.280	.284	.288	.292	.295	.299	.303	.307	.311
770	30.315	30.319	30.323	30.327	30.331	30.335	30.339	30.343	30.347	30.351
771	.355	.358	.362	.366	.370	.374	.378	.382	.386	.390
772	.394	.398	.402	.406	.410	.414	.418	.421	.425	.429
773	.433	.437	.441	.445	.449	.453	.457	.461	.465	.469
774	.473	.477	.481	.484	.488	.492	.496	.500	.504	.508
775	30.512	30.516	30.520	30.524	30.528	30.532	30.536	30.540	30.544	30.547
776	.551	.555	.559	.563	.567	.571	.575	.579	.583	.587
777	.591	.595	.599	.603	.607	.610	.614	.618	.622	.626
778	.630	.634	.638	.642	.646	.650	.654	.658	.662	.666
779	.670	.673	.677	.681	.685	.689	.693	.697	.701	.705
780	30.709	30.713	30.717	30.721	30.725	30.729	30.733	30.736	30.740	30.744
781	.748	.752	.756	.760	.764	.768	.772	.776	.780	.784
782	.788	.792	.795	.799	.803	.807	.811	.815	.819	.823
783	.827	.831	.835	.839	.843	.847	.851	.855	.859	.862
784	.866	.870	.874	.878	.882	.886	.890	.894	.898	.902
785	30.906	30.910	30.914	30.918	30.921	30.925	30.929	30.933	30.937	30.941
786	.945	.949	.953	.957	.961	.965	.969	.973	.977	.981
787	.984	.988	.992	.996	31.000	31.004	31.008	31.012	31.016	31.020
788	31.024	31.028	31.032	31.036	.040	.044	.047	.051	.055	.059
789	.063	.067	.071	.075	.079	.083	.087	.091	.095	.099
790	31.103	31.107	31.110	31.114	31.118	31.122	31.126	31.130	31.134	31.138
791	.142	.146	.150	.154	.158	.162	.166	.170	.173	.177
792	.181	.185	.189	.193	.197	.201	.205	.209	.213	.217
793	.221	.225	.229	.233	.236	.240	.244	.248	.252	.256
794	.260	.264	.269	.272	.276	.280	.284	.288	.292	.296
795	31.299	31.303	31.307	31.311	31.315	31.319	31.323	31.327	31.331	31.335
796	.339	.343	.347	.351	.355	.359	.362	.366	.370	.374
797	.378	.382	.386	.390	.394	.398	.402	.406	.410	.414
798	.418	.422	.425	.429	.433	.437	.441	.445	.449	.453
799	.457	.461	.465	.469	.473	.477	.481	.485	.488	.492
800	.496	.500	.504	.508	.512	.516	.520	.524	.528	.532

Hundredths of Millimetres.

0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**
.0000	.0004	.0008	.0012	.0016	.0020	.0024	.0028	.0032	.0036

III.

COMPARISON

OF OLD FRENCH AND ENGLISH BAROMETERS.

TABLE

FOR

CONVERTING PARIS LINES INTO ENGLISH INCHES AND DECIMALS,

GIVING IMMEDIATELY IN ENGLISH INCHES THE VALUES CORRESPONDING TO EVERY TENTH OF A PARIS LINE, FROM 240 LINES, OR 20 INCHES, TO 348 LINES, OR 29 INCHES.

1 Paris Line = 0.08882 English Inch.

Paris or French Lines.	Tenths of a Line.									
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**
20 Inches	Eng.Inch.	Eng.Inch.	Eng.Inch.	Eng.Inch.	Eng.Inch.	Eng.Inch.	Eng.Inch.	Eng.Inch.	Eng.Inch.	Eng.Inch.
240	21.317	21.326	21.335	21.343	21.352	21.361	21.370	21.379	21.388	21.397
241	21.406	21.415	21.423	21.432	21.441	21.450	21.459	21.468	21.477	21.486
242	21.494	21.503	21.512	21.521	21.530	21.539	21.548	21.557	21.566	21.574
243	21.583	21.592	21.601	21.610	21.619	21.628	21.637	21.645	21.654	21.663
244	21.672	21.681	21.690	21.699	21.708	21.716	21.725	21.734	21.743	21.752
245	21.761	21.770	21.779	21.788	21.796	21.805	21.814	21.823	21.832	21.841
246	21.850	21.859	21.867	21.876	21.885	21.894	21.903	21.912	21.921	21.930
247	21.939	21.947	21.956	21.965	21.974	21.983	21.992	22.001	22.010	22.018
248	22.027	22.036	22.045	22.054	22.063	22.072	22.081	22.090	22.098	22.107
249	22.116	22.125	22.134	22.143	22.152	22.161	22.169	22.178	22.187	22.196
250	22.205	22.214	22.223	22.232	22.241	22.249	22.258	22.267	22.276	22.285
251	22.294	22.303	22.312	22.320	22.329	22.338	22.347	22.356	22.365	22.374
21 In.=										
252	22.383	22.392	22.400	22.409	22.418	22.427	22.436	22.445	22.454	22.463
253	22.471	22.480	22.489	22.498	22.507	22.516	22.525	22.534	22.543	22.551
254	22.560	22.569	22.578	22.587	22.596	22.605	22.614	22.622	22.631	22.640
255	22.649	22.658	22.667	22.676	22.685	22.694	22.702	22.711	22.720	22.729
256	22.738	22.747	22.756	22.765	22.773	22.782	22.791	22.800	22.809	22.818
257	22.827	22.836	22.845	22.853	22.862	22.871	22.880	22.889	22.898	22.907
258	22.916	22.924	22.933	22.942	22.951	22.960	22.969	22.978	22.987	22.996
259	23.004	23.013	23.022	23.031	23.040	23.049	23.058	23.067	23.075	23.084
260	23.093	23.102	23.111	23.120	23.129	23.138	23.146	23.155	23.164	23.173
261	23.182	23.191	23.200	23.209	23.218	23.226	23.235	23.244	23.253	23.262
262	23.271	23.280	23.289	23.297	23.306	23.315	23.324	23.333	23.342	23.351
263	23.360	23.369	23.377	23.386	23.395	23.404	23.413	23.422	23.431	23.440
22 In.=										
264	23.448	23.457	23.466	23.475	23.484	23.493	23.502	23.511	23.520	23.528
265	23.537	23.546	23.555	23.564	23.573	23.582	23.591	23.599	23.608	23.617
266	23.626	23.635	23.644	23.653	23.662	23.671	23.679	23.688	23.697	23.706
267	23.715	23.724	23.733	23.742	23.750	28.759	23.768	23.777	23.786	23.795
268	23.804	23.813	23.822	23.830	23.839	23.848	23.857	23.866	23.875	23.884
269	23.893	23.901	23.910	23.919	23.928	23.937	23.946	23.955	23.964	23.973
270	23.981	23.990	23.999	24.008	24.017	24.026	24.035	24.044	24.052	24.061
271	24.070	24.079	24.088	24.097	24.106	24.115	24.124	24.132	24.141	24.150
272	24.159	24.168	24.177	24.186	24.195	24.203	24.212	24.221	24.230	24.239
273	24.248	24.257	24.266	24.275	24.283	24.292	24.301	24.310	24.319	24.328
274	24.337	24.346	24.354	24.363	24.372	24.381	24.390	24.399	24.408	24.417
275	24.426	24.434	24.443	24.452	24.461	24.470	24.479	24.488	24.497	24.505

Hundredths of a Line.

0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**
0.0	.0009	.0018	.0027	.0036	.0044	.0053	.0062	.0071	.0080

1 Paris Line = 0.08882 English Inch.

Paris or French Lines.	Tenths of a Line.									
	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.
23 Inches	Eng.Inch.	Eng.Inch.	Eng.Inch.	Eng.Inch.	Eng.Inch.	Eng.Inch.	Eng.Inch.	Eng.Inch.	Eng.Inch.	Eng.Inch.
276	24.514	24.523	24.532	24.541	24.550	24.559	24.568	24.576	24.585	24.594
277	24.603	24.612	24.621	24.630	24.639	24.648	24.656	24.665	24.674	24.683
278	24.692	24.701	24.710	24.719	24.727	24.736	24.745	24.754	24.763	24.772
279	24.781	24.790	24.799	24.807	24.816	24.825	24.834	24.843	24.852	24.861
280	24.870	24.878	24.887	24.896	24.905	24.914	24.923	24.932	24.941	24.950
281	24.958	24.967	24.976	24.985	24.994	24.003	25.012	25.021	25.029	25.038
282	25.047	25.056	25.065	25.074	25.083	25.092	25.101	25.109	25.118	25.127
283	25.136	25.145	25.154	25.163	25.172	25.180	25.189	25.198	25.207	25.216
284	25.225	25.234	25.243	25.252	25.260	25.269	25.278	25.287	25.296	25.305
285	25.314	25.323	25.331	25.340	25.349	25.358	25.367	25.376	25.385	25.394
286	25.403	25.411	25.420	25.429	25.438	25.447	25.456	25.465	25.474	25.482
287	25.491	25.500	25.509	25.518	25.527	25.536	25.545	25.554	25.562	25.571
24 In.=										
288	25.580	25.589	25.598	25.607	25.616	25.625	25.633	25.642	25.651	25.660
289	25.669	25.678	25.687	25.696	25.705	25.713	25.722	25.731	25.740	25.749
290	25.758	25.767	25.776	25.784	25.793	25.802	25.811	25.820	25.829	25.838
291	25.847	25.856	25.864	25.873	25.882	25.891	25.900	25.909	25.918	25.927
292	25.935	25.944	25.953	25.962	25.971	25.980	25.989	25.998	26.007	26.015
293	26.024	26.033	26.042	26.051	26.060	26.069	26.078	26.086	26.095	26.104
294	26.113	26.122	26.131	26.140	26.149	26.157	26.166	26.175	26.184	26.193
295	26.202	26.211	26.220	26.229	26.237	26.246	26.255	26.264	26.273	26.282
296	26.291	26.300	26.308	26.317	26.326	26.335	26.344	26.353	26.362	26.371
297	26.380	26.388	26.397	26.406	26.415	26.424	26.433	26.442	26.451	26.459
298	26.468	26.477	26.486	26.495	26.504	26.513	26.522	26.531	26.539	26.548
299	26.557	26.566	26.575	26.584	26.593	26.602	26.610	26.619	26.628	26.637
25 In.=										
300	26.646	26.655	26.664	26.673	26.682	26.690	26.699	26.708	26.717	26.726
301	26.735	26.744	26.753	26.761	26.770	26.779	26.788	26.797	26.806	26.815
302	26.824	26.833	26.841	26.850	26.859	26.868	26.877	26.886	26.895	26.904
303	26.912	26.921	26.930	26.939	26.948	26.957	26.966	26.975	26.984	26.992
304	27.001	27.010	27.019	27.028	27.037	27.046	27.055	27.063	27.072	27.081
305	27.090	27.099	27.108	27.117	27.126	27.135	27.143	27.152	27.161	27.170
306	27.179	27.188	27.197	27.206	27.214	27.223	27.232	27.241	27.250	27.259
307	27.268	27.277	27.286	27.294	27.303	27.312	27.321	27.330	27.339	27.348
308	27.357	27.365	27.374	27.383	27.392	27.401	27.410	27.419	27.428	27.437
309	27.445	27.454	27.463	27.472	27.481	27.490	27.499	27.508	27.516	27.525
310	27.534	27.543	27.552	27.561	27.570	27.579	27.587	27.596	27.605	27.614
311	27.623	27.632	27.641	27.650	27.659	27.667	27.676	27.685	27.694	27.703

Hundredths of a Line.									
0.	1.	2.	3.	4.	5.	6.	7.	8.	9.
0.0	.0009	.0018	.0027	.0036	.0044	.0053	.0062	.0071	.0080

1 Paris Line = 0.08882 English Inch.

Paris or French Lines.	Tenths of a Line.									
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**
26 Inches	Eng.Inch.	Eng.Inch.	Eng.Inch.	Eng.Inch.	Eng.Inch	Eng.Inch.	Eng.Inch.	Eng.Inch.	Eng.Inch.	Eng.Inch
312	27.712	27.721	27.730	27.738	27.747	27.756	27.765	27.774	27.783	27.792
313	27.801	27.810	27.818	27.827	27.836	27.845	27.854	27.863	27.872	27.881
314	27.889	27.878	27.907	27.916	27.925	27.934	27.943	27.952	27.961	27.969
315	27.978	27.987	27.996	28.005	28.014	28.023	28.032	28.040	28.049	28.058
316	28.067	28.076	28.085	28.094	28.103	28.112	28.120	28.129	28.138	28.147
317	28.156	28.165	28.174	28.183	28.191	28.200	28.209	28.218	28.227	28.236
318	28.245	28.254	28.263	28.271	28.280	28.289	28.298	28.307	28.316	28.325
319	28.334	28.342	28.351	28.360	28.369	28.378	28.387	28.396	28.405	28.414
320	28.422	28.431	28.440	28.449	28.458	28.467	28.476	28.485	28.493	28.502
321	28.511	28.520	28.529	28.538	28.547	28.556	28.565	28.573	28.582	28.591
322	28.600	28.609	28.618	28.627	28.636	28.644	28.653	28.662	28.671	28.680
323	28.689	28.698	28.707	28.716	28.724	28.733	28.742	28.751	28.760	28.769
27 In.=										
324	28.778	28.787	28.795	28.804	28.813	28.822	28.831	28.840	28.849	28.858
325	28.867	28.875	28.884	28.893	28.902	28.911	28.920	28.929	28.938	28.946
326	28.955	28.964	28.973	28.982	28.991	29.000	29.009	29.017	29.026	29.035
327	29.044	29.053	29.062	29.071	29.080	29.089	29.097	29.906	29.115	29.124
328	29.133	29.142	29.151	29.160	29.168	29.177	29.186	29.195	29.204	29.213
329	29.222	29.231	29.240	29.248	29.257	29.266	29.275	29.284	29.293	29.302
330	29.311	29.319	29.328	29.337	29.346	29.355	29.364	29.373	29.382	29.391
331	29.399	29.408	29.417	29.426	29.435	29.444	29.453	29.462	29.470	29.479
332	29.488	29.497	29.506	29.515	29.524	29.533	29.542	29.550	29.559	29.568
333	29.577	29.586	29.595	29.604	29.613	29.621	29.630	29.639	29.648	29.657
334	29.666	29.675	29.684	29.693	29.701	29.710	29.719	29.728	29.737	29.746
335	29.755	29.764	29.772	29.781	29.790	29.799	29.808	29.817	29.826	29.835
28 In. =										
336	29.844	29.852	29.861	29.870	29.879	29.888	29.897	29.906	29.915	29.923
337	29.932	29.941	29.950	29.959	29.968	29.977	29.986	29.995	30.003	30.012
338	30.021	30.030	30.039	30.048	30.057	30.066	30.074	30.083	30.092	30.101
339	30.110	30.119	30 128	30.137	30.146	30.154	30.163	30.172	30.181	30.190
340	30.199	30.208	30.217	30.225	30.234	30.243	30.252	30.261	30.270	30.279
341	30.288	30.297	30.305	30.314	30.323	30.332	30.341	30.350	30.359	30.368
342	30.376	30.385	30.394	30.403	30.412	30.421	30.430	30.439	30.448	30.456
343	30.465	30.474	30.483	30.492	30.501	30.510	30.519	30.527	30.536	30.545
344	30.554	30 563	30.572	30.581	30.590	30.598	30.607	30.616	30.625	30.634
345	30.643	30.652	30.661	30.670	30.678	30.687	30.696	30.705	30.714	30.723
346	30.732	30.741	30.749	30.758	30.767	30.776	30.785	30.794	30.803	30.812
347	30.821	30.829	30.838	30.847	30.856	30.865	30.874	30.883	30.892	30.900
29 In.=										
348	30.909	30.918	30.927	30.936	30.945	30.954	30.963	30.972	30.980	30.989

Hundredths of a Line.

0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**
0.0	.0009	.0018	.0027	.0036	.0044	.0053	.0062	.0071	.0080

IV.

COMPARISON

OF OLD FRENCH AND METRICAL BAROMETERS.

TABLE

FOR

CONVERTING PARIS LINES INTO MILLIMETRES,

GIVING IMMEDIATELY IN MILLIMETRES THE VALUES CORRESPONDING TO EVERY TENTH OF A PARIS LINE, FROM 240 LINES, OR 20 INCHES, TO 348 LINES, OR 29 INCHES.

1 Paris Line = 2.25583 Millimetres.

Paris or French Lines.	Tenths of a Line.									
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**
20 Inches	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.
240	541.40	541.62	541.85	542.08	542.30	542.53	542.75	542.98	543.20	543.43
241	543.66	543.88	544.11	544.33	544.56	544.78	545.01	545.23	545.46	545.69
242	545.91	546.14	546.36	546.59	546.82	547.04	547.27	547.49	547.72	547.94
243	548.17	548.39	548.62	548.85	549.07	549.29	549.52	549.75	549.97	550.20
244	550.42	550.65	550.87	551.10	551.32	551.55	551.78	552.00	552.23	552.46
245	552.68	552.91	553.13	553.36	553.58	553.81	554.03	554.26	554.49	554.71
246	554.93	555.16	555.39	555.61	555.84	556.06	556.29	556.51	556.74	556.96
247	557.19	557.42	557.64	557.87	558.09	558.32	558.55	558.77	558.99	559.22
248	559.45	559.67	559.90	560.13	560.35	560.58	560.80	561.03	561.25	561.48
249	561.70	561.93	562.16	562.38	562.61	562.83	563.06	563.28	563.51	563.73
250	563.96	564.19	564.41	564.64	564.86	565.09	565.31	565.54	565.76	565.99
251	566.21	566.44	566.67	566.89	567.12	567.34	567.57	567.79	568.02	568.25
21 Inches										
252	568.47	568.70	568.92	569.15	569.37	569.60	569.83	570.05	570.28	570.50
253	570.72	570.95	571.18	571.40	571.63	571.86	572.08	572.31	572.53	572.76
254	572.98	573.21	573.43	573.66	573.89	574.11	574.34	574.56	574.79	575.01
255	575.24	575.46	575.69	575.92	576.14	576.37	576.59	576.82	577.04	577.27
256	577.49	577.72	577.95	578.17	578.40	578.62	578.85	579.07	579.30	579.53
257	579.75	579.98	580.20	580.43	580.65	580.88	581.10	581.33	581.56	581.78
258	582.00	582.23	582.46	582.68	582.91	583.13	583.36	583.59	583.81	584.04
259	584.26	584.49	584.71	584.94	585.16	585.39	585.62	585.84	586.07	586.29
260	586.52	586.74	586.97	587.19	587.42	587.65	587.87	588.10	588.32	588.55
261	588.77	589.00	589.22	589.45	589.68	589.90	590.13	590.35	590.58	590.80
262	591.03	591.26	591.48	591.71	591.93	592.16	592.38	592.61	592.83	593.06
263	593.28	593.51	593.74	593.96	594.19	594.41	594.64	594.86	595.09	595.31
22 Inches										
264	595.54	595.76	595.99	596.22	596.44	596.67	596.89	597.12	597.35	597 57
265	597.79	598.02	598.25	598.47	598.70	598.92	599.15	599.38	599.60	599.83
266	600.05	600.28	600.50	600.73	600.96	601.18	601.41	601.63	601.86	602.08
267	602.31	602.53	602.76	602.99	603.21	603.44	603.66	603.89	604.11	604.34
268	604.56	604.79	605.01	605.24	605.47	605.69	605.92	606.14	606.37	606.59
269	606.82	607.05	607.27	607.50	607.72	607.95	608.17	608.40	608.62	608.85
270	609.07	609.30	609.53	609.75	609.98	610.20	610.43	610.66	610.88	611.11
271	611.33	611.56	611.78	612.01	612.23	612.46	612.69	612.91	613.14	613.36
272	613.59	613.81	614.04	614.26	614.49	614.72	614.94	615.17	615.39	615.62
273	615.84	616.07	616.29	616.52	616.75	616.97	617.20	617.42	617.65	617.87
274	618.10	618.32	618.55	618.78	619.00	619.23	619.45	619.68	619.90	620.13
275	620.35	620.58	620.81	621.03	621.26	621.48	621.71	621.93	622.16	622.39

Hundredths of a Line.

0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**
0.0	0.023	0.045	0.068	0.090	0.113	0.135	0.158	0.180	0.203

1 Paris Line = 2.25583 Millimetres.

Paris or French Lines.	Tenths of a Line.									
	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.
23 Inches	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.
276	622.61	622.84	623.06	623.29	623.51	623.74	923.96	624.19	624.42	624.64
277	624.86	625.09	625.32	625.54	625.77	625.99	626.22	626.45	626.67	626.90
278	627.12	627.35	627.57	627.80	628.02	628.25	628.48	628.70	628.93	629.15
279	629.38	629.60	629.83	630.05	630.28	630.51	630.73	630.96	631.18	631.41
280	631.63	631.85	632.08	632.30	632.53	632.75	632.98	633.20	633.43	633.65
281	633.89	634.12	634.34	634.57	634.79	635.02	635.24	635.47	635.69	635.92
282	636.14	636.37	636.60	636.82	637.05	637.27	637.50	637.72	637.95	638.18
283	638.40	638.63	638.85	639.08	639.30	639.53	639.75	639.98	640.21	640.43
284	640.66	640.88	641.11	641.33	641.56	641.79	642.01	642.24	643.46	642.69
285	642.91	643.14	643.36	643.59	643.82	644.04	644.27	644.49	644.72	644.94
286	645.17	645.39	645.62	645.84	646.07	646.30	646.52	646.75	646.97	647.20
287	647.42	647.65	647.87	648.10	648.33	648.55	648.78	649.00	649.23	649.45
24 Inches										
288	649.68	649.91	650.13	650.36	650.58	650.81	651.03	651.26	651.49	651.71
289	651.93	652.16	652.39	652.61	652.84	653.06	653.29	653.52	653.74	653.97
290	654.19	654.42	654.64	654.87	655.09	655.32	655.55	655.77	656.00	656 22
291	656.45	656.67	656.90	657.12	657.35	657.58	657.80	658.03	658.25	658.48
292	658.70	658.93	659.15	659.38	659.61	659.83	660.06	660.28	660.51	660.73
293	660.96	661.19	661.41	661.64	661.86	662.09	662.31	662.54	662.76	662.99
294	663.21	663.44	663.67	663.89	664.12	664.34	664.57	664.79	665.02	665.25
295	665.47	665.70	665.92	666.15	666.37	666.60	666.82	667.05	667.28	667.50
296	667.73	667.95	668.18	668.40	668.63	668.85	669.08	669.31	669.53	669.76
297	669.98	670.21	670.43	670.64	670.88	671.11	671.34	671.56	671.79	672.01
298	672.24	672.46	672.69	672.92	673.14	673.37	673.59	673.82	674.04	674.27
299	674.49	674.72	674.94	675.17	675.40	675.62	675.85	676.07	676.30	676.52
25 Inches										
300	676.75	676.97	677.20	677.43	677.65	677.88	678.10	678.33	678.55	678.78
301	679.00	679.23	679.46	679.68	679.91	680.13	680.36	680.58	680.81	681.04
302	681.26	681.49	681.71	681.94	682.16	682.39	682.62	682.84	683.07	683.29
303	683.52	683.74	683.97	684.19	684.42	684.64	684.87	685.10	685.32	685.55
304	685.77	686.00	686.22	686.45	686.68	686.90	687.13	687.35	687.58	687.80
305	688.03	688.25	688.48	688.71	688.93	689.16	689.38	689.61	689.83	690.06
306	690.28	690.51	690.74	690.96	691.19	691.41	691.64	691.86	692.09	692.32
307	692.54	692.77	692.99	693.22	693.44	693.67	693.89	694.12	694.35	694.57
308	694.80	695.02	695.25	695.47	695.70	695.92	696.15	696.38	696.60	696.93
309	697.05	697.28	697.50	697.73	697.95	698.18	698.41	698.63	698.86	699.08
310	699.31	699.53	699.76	699.98	700.21	700.44	700.66	700.89	701.11	701.34
311	701.56	701.79	702 02	702.24	702.47	702.69	702.92	703.14	703.37	703.59

Hundredths of a Line.

0.	1.	2.	3.	4.	5.	6.	7.	8.	9.
0.0	0.023	0 045	0.068	0.090	0.113	0.135	0.158	0.180	0.203

1 Paris Line = 2.25583 Millimetres.

Paris or French Lines.	Tenths of a Line.									
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**
26 Inches	Millim	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.
312	703.82	704.05	704.27	704.50	704.72	704.95	705.17	705.40	705.62	705.85
313	706.07	706.30	706.53	706.75	706.98	707.20	707.43	707.65	707.88	708.11
314	708.33	708.56	708.78	709.01	709.23	709.46	709.68	709.91	710.14	710.36
315	710.59	710.81	711.04	711.26	711.49	711.71	711.94	712.17	712.39	712.62
316	712.84	713.07	713.29	713.52	713.75	713.97	714.20	714.42	714.65	714.87
317	715.10	715.32	715.55	715.78	716.00	716.23	716.45	716.68	716.90	717.13
318	717.35	717.58	717.81	718.03	718.26	718.48	718.71	718.93	719.16	719.38
319	719.61	719.84	720.06	720.29	720.51	720.74	720.96	721.19	721.41	721.64
320	721.87	722.09	722.32	722.54	722.77	722.99	723.22	723.45	723.67	723.90
321	724.12	724.35	724.57	724.80	725.02	725.25	725.48	725.70	725.93	726.15
322	726.38	726.60	726.83	727.05	727.28	727.51	727.73	727.96	728.18	728.41
323	728.63	728.86	729.08	729.31	729.54	729.76	729.99	730.21	730.44	730.66
27 Inches										
324	730.89	731.11	731.34	731.57	731.79	732.02	732.24	732.47	732.69	732.92
325	733.14	733.37	733.60	733.82	734.05	734.27	734.50	734.72	734.95	735.18
326	735.40	735.63	735.85	736.08	736.30	736.53	736.75	736.98	737.21	737.43
327	737.66	737.89	738.11	738.33	738.56	738.78	739.01	739.24	739.46	739.69
328	739.91	740.14	740.36	740.59	740.81	741.04	741.27	741.49	741.72	741.94
329	742.17	742.39	742.62	742.84	743.07	743.30	743.52	743.75	743.97	744.20
330	744.42	744.65	744.88	745.10	745.33	745.55	745.78	746.00	746.23	746.45
331	746.68	746.91	747.13	747.36	747.58	747.81	748.03	748.26	748.48	748.71
332	748.94	749.16	749.39	749.61	749.84	750.06	750.29	750.51	750.74	750.97
333	751.19	751.42	751.64	751.87	752.09	752.32	752.54	752.77	753.00	753.22
334	753.45	753.67	753.90	754.12	754.35	754.58	754.80	755.03	755.25	755.48
335	755.70	755.93	756.15	756.38	756.61	756.83	757.06	757.28	757.51	757.73
28 Inches										
336	757.96	758.18	758.41	758.64	758.86	759.09	759.31	759.54	759.76	759.99
337	760.21	760.44	760.67	760.89	761.12	761.34	761.57	761.79	762.02	762.24
338	762.47	762.70	762.92	763.15	763.37	763.60	763.82	764.05	764.28	764.50
339	764.73	764.95	765.18	765.40	765.63	765.85	766.08	766.31	766.53	766.76
340	766.98	767.21	767.43	767.66	767.88	768.11	768.34	768.56	768.79	769.01
341	769.24	769.46	769.69	769.91	770.14	770.37	770.59	770.82	771.04	771.27
342	771.49	771.72	771.94	772.17	772.40	772.62	772.85	773.07	773.30	773.52
343	773.75	773.98	774.20	774.43	774.65	774.88	775.10	775.33	775.55	775.78
344	776.01	776.23	776.46	776.68	776.91	777.13	777.36	777.58	777.81	778.04
345	778.26	778.49	778.71	778.94	779.16	779.39	779.61	779.84	780.07	780.29
346	780.52	780.74	780.97	781.19	781.42	781.64	781.87	782.10	782.32	782.55
347	782.77	783.00	783.22	783.45	783.67	783.90	784.13	784.35	784.58	784.80
29 Inches										
348	785.03	785.25	785.48	785.71	785.93	786.16	786.38	786.61	786.83	787.06

Hundredths of a Line.

0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**
0.0	0.023	0.045	0.068	0.090	0.113	0.135	0.158	0.180	0.203

RUSSIAN BAROMETER.

A REGULAR system of Meteorological Observations has been established by order of the Russian government throughout the extensive regions placed under its sway, and a vast amount of observations made in Europe, in Asia, and in North America have already been published. The scale of the barometer employed in this system is divided in units, each of which is equal to one half of a Russian, or English decimal line, that is, 1 = 0.05 of an inch, 600 half-lines of the Russian Barometer being = 30 inches of the English Barometer.

The conversion of this scale, which is the English scale, slightly modified in its form, is easy. It suffices to divide the Russian heights by two, and to put back, by one figure, the decimal point, in order to have them converted into English inches and decimals, and by means of the English scale into any other. This transformation is so easy to effect, that a peculiar table for it would seem superfluous.

The normal temperature of the standard being the same as that of the English, that is, 13°⅓ Reaumur, or 62° Fahrenheit, the reduction of the Russian Barometer to the freezing point can be made by means of the table for reducing the English Barometers. But the attached thermometer being that of Reaumur, its indications must be first converted into degrees of Fahrenheit.

TABLES

FOR

REDUCING THE BAROMETRICAL OBSERVATIONS TAKEN AT ANY TEMPERATURE TO THE TEMPERATURE OF THE FREEZING POINT.

The variations of the mercurial column in a stationary barometer are due to two causes, the changes of atmospheric pressure and the variations of temperature of the mercury, which affect the length of the column by changing its density. The variations of atmospheric pressure, which alone the barometer is destined to ascertain, are therefore hidden, and their observation falsified by the expansion or contraction of the mercury due to changes of temperature. For, supposing that, while the atmospheric pressure remains the same, the temperature of the instrument becomes lower, the mercurial column will become shorter, and the barometer will appear to fall; if the pressure becomes less, but the temperature increases, the expansion of the mercury will tend to compensate the diminution of pressure, and the barometer may remain stationary, or even may rise, while it ought to be falling; in other cases the action of temperature will tend to increase the amount of the changes of the barometrical height. It is therefore evident that successive observations, with the same barometer, do not give *directly* the actual changes of atmospheric pressure, unless they have been taken exactly at the same temperature, a case which, in practice, seldom occurs. Likewise simultaneous observations, taken with various barometers, do not give *directly* the actual differences of the absolute pressure of the atmosphere above the instruments. To obtain the true barometrical heights, that is, the action of the atmospheric pressure alone, the influence of the temperature must first be eliminated from the observed heights. This is done by reducing, by means of the following Tables, the various barometrical columns to the length they would have at a given temperature, which is the same for all. For the sake of convenient comparison, the freezing point has been almost universally adopted as the standard temperature to which all observations are to be reduced.

Construction of the Tables.

In all the following Tables the barometers are supposed to be furnished with brass scales, extending from the surface of the mercury in the cistern to the top of the mercurial column. The correction to be applied is therefore composed of two elements: the correction for the expansion of the mercury, and that for the expansion of the scale; both of which ought to be, and have been, taken into account.

Indeed, the correction for the expansion of mercury is not sufficient to reduce the readings to the height which the barometer would indicate, under the same pressure, at the temperature of the freezing point. For when the temperature rises the mercurial column expands; but then the scale also grows longer, and this will tend to lower the reading of the height. The correction for the expansion of the mercury

must thus be diminished by the amount of that of the scale, that is, by nearly $\frac{1}{10}$, this being the proportion between the expansion of brass and that of mercury.

It is also the expansion of the scale which causes an apparent anomaly in the Tables for the Reduction of the English and Old French Barometers. It can be seen, that, though the observations are to be reduced to the freezing point, or to 32° Fahrenheit and zero Reaumur, the Tables give still a correction for observations taken at that temperature. The reason of it is, that the normal length of the English and Old French standards has not been determined at the temperature of the freezing point, as is the case with the metre, but respectively at the temperatures of 62° Fahrenheit and 13° Reaumur. It is thus *only at these temperatures* that the scales graduated with these standards have their true length. Above and below, the inches of the scales are longer or shorter than the inches of the standards. At the freezing point, therefore, the correction for the expansion of the mercury is null, but that for the expansion of the scale is not. The scale being too short, the reading will be too high, and a *subtractive* correction must still be applied, which will be gradually compensated at lower temperatures by the now *additive* correction of the mercurial column. Thus the point of no correction will occur at 28°.5 Fahrenheit, instead of 32°, in the English Barometer, and at —1°.5 Reaumur, instead of zero, in the Old French.

Schumacher has calculated and published in his *Collection of Tables*, &c., and in his *Jahrbuch* for 1836, 1837, and 1838, extensive tables for the reduction of the English, Old French, and Metrical Barometers, using the following general formula: —

Let h = observed height.
" t = temperature of the attached thermometer.
" T = temperature to which the observed height is to be reduced.
" m = expansion, in volume, of mercury.
" l = linear expansion of brass.
" ϑ = normal temperature of the standard scale.

The reduction to the freezing point will be given by the formula, —

$$h \cdot \frac{m(t-T) - l(t-\vartheta)}{1+m(t-T)}$$

The following tables, which may be found more convenient for ordinary use, have been calculated after the same formula. Table V., published in the Instructions of the Royal Society of London, is mostly abstracted from the table of Schumacher. It gives the reduction of the English Barometer, adopting the following values: —

Let h = observed height in English inches.
" t = temperature of attached thermometer in degrees of Fahrenheit.
" m = expansion, in volume, of mercury for one degree Fahrenheit = 0.0001001.
" l = linear expansion of brass for one degree Fahrenheit = 0.0000104344.

The normal temperature of standard being = 62°.

The reduction to 32° Fahrenheit will be given then by the formula, —

$$-h \cdot \frac{m(t-32) - l(t-62)}{1+m(t-32)}$$

The values for Tables VII., VIII., and IX. are to be found at the head of each.

V.

ENGLISH BAROMETER.

TABLE

FOR

GIVING THE CORRECTION TO BE APPLIED TO ENGLISH BAROMETERS,

WITH BRASS SCALES EXTENDING FROM THE CISTERN TO THE TOP OF THE MERCURIAL COLUMN, FOR REDUCING THE OBSERVATIONS TO THIRTY-TWO DEGREES FAHRENHEIT.

Table V.

The following Table, calculated after that of Schumacher, has been adopted by the Committee of Physics and Meteorology of the Royal Society of London. It gives immediately the correction for every degree of Fahrenheit, and for every half-inch from 20 up to 31 inches. The scale of the barometer is supposed to be of brass, extending from the cistern to the top of the mercurial column. The difference of expansion of brass and mercury is taken into account. The standard temperature of the yard being 62° Fahr., and not 32° Fahr., the difference of expansion of the scale and of the mercurial column carries the point of no correction down to 29° Fahr. Therefore, from 29° up the correction must be *subtracted* from, from 29° down it must be *added* to, the observed height.

Examples of Calculation.

Barometer, observed height, ... 30.231
Attached thermometer 82° Fahr.

See in the last page the column of 30 inches; go down as far as the horizontal line corresponding with 82° in the first vertical column, which contains the temperatures; you will find there the correction —.143. We have thus: —

Barometer, observed height, ...	30.231
Subtractive correction for 82° Fahr., . . .	—0.143
Barometer at 32° Fahr., . . .	30.088

Barometer, observed height, ... 29.743
Attached thermometer 25° Fahr.
The column of 29.5 inches opposite to 25° Fahr. gives an

additive correction of, ...	+0.009
Barometer at 32° Fahr., . . .	29.752

It will be easy to apply also the correction for fractions of a degree Fahrenheit, for example: —

Barometer, observed height, ... 28.358
Attached thermometer 71.3
In the column of 28.5 inches, we find that the difference between the correction for 71° and that for 72° is .003; dividing this difference proportionally to the fraction, we have for three tenths of a degree a correction of —.001, which added to —.108, the correction for 71°, makes a total correction of, ... —.109

And barometer at 32° Fahr., . . . 28.249

Degrees of Fahrenheit.	English Inches.								Degrees of Fahrenheit.
	20	20.5	21	21.5	22	22.5	23	23.5	
°									°
0	+.051	+.053	+.054	+.055	+.056	+.058	+.059	+.060	0
1	.049	.051	.052	.053	.054	.056	.057	.058	1
2	.048	.049	.050	.051	.052	.054	.055	.056	2
3	.046	.047	.048	.049	.050	.052	.053	.054	3
4	.044	.045	.046	.047	.048	.050	.051	.052	4
5	.042	.043	.044	.045	.046	.048	.049	.050	5
6	+.040	+.042	+.042	+.044	+.044	+.046	+.047	+.048	6
7	.039	.040	.041	.042	.042	.044	.044	.046	7
8	.037	.038	.039	.040	.041	.041	.042	.043	8
9	.035	.036	.037	.038	.039	.039	.040	.041	9
10	.033	.034	.035	.036	.037	.037	.038	.039	10
11	+.031	+.032	+.033	+.034	+.035	+.035	+.036	+.037	11
12	.030	.030	.031	.032	.033	.033	.034	.035	12
13	.028	.029	.029	.030	.031	.031	.032	.033	13
14	.026	.027	.027	.028	.029	.029	.030	.031	14
15	.024	.025	.026	.026	.027	.027	.028	.029	15
16	+.022	+.023	+.024	+.024	+.025	+.025	+.026	+.026	16
17	.021	.021	.022	.022	.023	.023	.024	.024	17
18	.019	.019	.020	.020	.021	.021	.022	.022	18
19	.017	.018	.018	.018	.019	.019	.020	.020	19
20	.015	.016	.016	.016	.017	.017	.018	.018	20
21	+.014	+.014	+.014	+.015	+.015	+.015	+.015	+.016	21
22	.012	.012	.012	.013	.013	.013	.013	.014	22
23	.010	.010	.010	.011	.011	.011	.011	.012	23
24	.008	.008	.009	.009	.009	.009	.009	.010	24
25	.006	.007	.007	.007	.007	.007	.007	.007	25
26	+.005	+.005	+.005	+.005	+.005	+.005	+.005	+.005	26
27	.003	.003	.003	.003	.003	.003	.003	.003	27
28	.001	.001	.001	.001	.001	.001	.001	.001	28
29	−.001	−.001	−.001	−.001	−.001	−.001	−.001	−.001	29
30	.003	.003	.003	.003	.003	.003	.003	.003	30
31	−.005	−.005	−.005	−.005	−.005	−.005	−.005	−.005	31
32	.006	.006	.007	.007	.007	.007	.007	.007	32
33	.008	.008	.008	.009	.009	.009	.009	.010	33
34	.010	.010	.010	.011	.011	.011	.011	.012	34
35	.012	.012	.012	.013	.013	.013	.013	.014	35
36	−.013	−.014	−.014	−.014	−.015	−.015	−.016	−016	36
37	.015	.016	.016	.016	.017	.017	.018	.018	37
38	.017	.017	.018	.018	.019	.019	.020	.020	38
39	.019	.019	.020	.020	.021	.021	.022	.022	39
40	.021	.021	.022	.022	.023	.023	.024	.024	40
41	−.022	−.023	−.024	−.024	−.025	−.025	−.026	−.026	41
42	.024	.025	.025	.026	.027	.027	.028	.028	42
43	.026	.027	.027	.028	.029	.029	.030	.031	43
44	.028	.029	.029	.030	.031	.031	.032	.033	44
45	.030	.030	.031	.032	.033	.033	.034	.035	45
46	−.031	−.032	−.033	−.034	−.035	−.035	−.036	−.037	46
47	.033	.034	.035	.036	.036	.037	.038	.039	47
48	.035	.036	.037	.038	.038	.039	.040	.041	48
49	.037	.038	.039	.040	.040	.041	.042	.043	49
50	.038	039	.040	.041	.042	.043	.044	.045	50

Degrees of Fahrenheit.	Tenths of Degrees.								Degrees of Fahrenheit.
	20	20.5	21	21.5	22	22.5	23	23.5	
°									°
51	−.040	−.041	−.042	−.043	−.044	−.045	−.046	−.047	51
52	.042	.043	.044	.045	.046	.047	.048	.049	52
53	.044	.045	.046	.047	.048	.049	.050	.052	53
54	.046	.047	.048	.049	.050	.051	.052	.054	54
55	.047	.049	.050	.051	.052	.053	.055	.056	55
56	−.049	−.050	−.052	−.053	−.054	−.055	−.057	−.058	56
57	.051	.052	.054	.055	.056	.057	.059	.060	57
58	.053	.054	.055	.057	.058	.059	.061	.062	58
59	.055	.056	.057	.059	.060	.061	.063	.064	59
60	.056	.058	.059	.061	.062	.063	.065	.066	60
61	−.058	−.060	−.061	−.062	−.064	−.065	−.067	−.068	61
62	.060	.061	.063	.064	.066	.067	.069	.070	62
63	.062	.063	.065	.066	.068	.069	.071	.072	63
64	.063	.065	.067	.068	.070	.071	.073	.075	64
65	.065	.067	.068	.070	.072	.073	.075	.077	65
66	−.067	−.069	−.070	−.072	−.074	−.075	−.077	−.079	66
67	.069	.071	.072	.074	.076	.077	.079	.081	67
68	.071	.072	.074	.076	.078	.079	.081	.083	68
69	.072	.074	.076	.078	.080	.081	.083	.085	69
70	.074	.076	.078	.080	.082	.083	.085	.087	70
71	−.076	−.078	−.080	−.082	−.083	−.085	−.087	−.089	71
72	.078	.080	.082	.084	.085	.087	.089	.091	72
73	.079	.081	.083	.085	.087	.089	.091	.093	73
74	.081	.083	.085	.087	.089	.091	.093	.095	74
75	.083	.085	.087	.089	.091	.093	.095	.098	75
76	−.085	−.087	−.089	−.091	−.093	−.095	−.097	−.100	76
77	.087	.089	.091	.093	.095	.097	.100	.102	77
78	.088	.091	.093	.095	.097	.099	.102	.104	78
79	.090	.092	.095	.097	.099	.101	.104	.106	79
80	.092	.094	.096	.099	.101	.103	.106	.108	80
81	−.094	−.096	−.098	−.101	−.103	−.105	−.108	−.110	81
82	.095	.098	.100	.103	.105	.107	.110	.112	82
83	.097	.100	.102	.104	.107	.109	.112	.114	83
84	.099	.101	.104	.106	.109	.111	.114	.116	84
85	.101	.103	.106	.108	.111	.113	116	.118	85
86	−.103	−.105	−.108	−.110	−.113	−.115	−.118	−.120	86
87	.104	.107	.109	.112	.115	.117	.120	.123	87
88	.106	.109	.111	.114	.117	.119	.122	.125	88
89	.108	.111	.113	.116	.119	.121	.124	.127	89
90	.110	.112	.115	.118	.121	.123	.126	.129	90
91	−.111	−.114	−.117	−.120	−.122	−.125	−.128	−.131	91
92	.113	.116	.119	.122	.124	.127	.130	.133	92
93	.115	.118	.121	.124	.126	.129	.132	.135	93
94	.117	.120	.122	.125	.128	.131	.134	.137	94
95	.118	.121	.124	.127	.130	.133	.136	.139	95
96	−.120	−.123	−.126	−.129	−.132	−.135	−.138	−.141	96
97	.122	.125	.128	.131	.134	.137	.140	.143	97
98	.124	.127	.130	.133	.136	.139	.142	.145	98
99	.125	.129	.132	.135	.138	.141	.144	.147	99
100	.127	.130	.134	.137	140	.143	.146	.150	100

Degrees of Fahrenheit.	English Inches.								Degrees of Fahrenheit.
	24	24.5	25	25.5	26	26.5	27	27.5	
°									°
0	+.061	+.063	+.064	+.065	+.067	+.068	+.069	+.071	0
1	.059	.061	.062	.063	.064	.065	.067	.068	1
2	.057	.058	.060	.061	.062	.063	.064	.066	2
3	.055	.056	.057	.059	.060	.061	.062	.063	3
4	.053	.054	.055	.056	.057	.058	.059	.061	4
5	.051	.052	.053	.054	.055	.056	.057	.058	5
6	+.049	+.050	+.051	+.052	+.053	+.054	+.055	+.056	6
7	.046	.047	.048	.049	.050	.051	.052	.053	7
8	.044	.045	.046	.047	.048	.049	.050	.051	8
9	.042	.043	.044	.045	.046	.046	.047	.048	9
10	.040	.041	.042	.042	.043	.044	.045	.046	10
11	+.038	+.039	+.039	+.040	+.041	+.042	+.042	+.043	11
12	.036	.036	.037	.038	.039	.039	.040	.041	12
13	.033	.034	.035	.036	.036	.037	.038	.038	13
14	.031	.032	.033	.033	.034	.035	.035	.036	14
15	.029	.030	.030	.031	.032	.032	.033	.033	15
16	+.027	+.028	+.028	+.029	+.029	+.030	+.030	+.031	16
17	.025	.025	.026	.026	.027	.027	.028	.028	17
18	.023	.023	.024	.024	.025	.025	.025	.026	18
19	.021	.021	.021	.022	.022	.023	.023	.024	19
20	.018	.019	.019	.020	.020	.020	.021	.021	20
21	+.016	+.017	+.017	+.017	+.018	+.018	+.018	+.019	21
22	.014	.014	.015	.015	.015	.016	.016	.016	22
23	.012	.012	.012	.013	.013	.013	.013	.014	23
24	.010	.010	.010	.010	.011	.011	.011	.011	24
25	.008	.008	.008	.008	.008	.008	.009	.009	25
26	+.005	+.006	+.006	+.006	+.006	+.006	+.006	+.006	26
27	.003	.003	.003	.003	.004	.004	.004	.004	27
28	.001	.001	.001	.001	.001	.001	.001	.001	28
29	−.001	−.001	−.001	−.001	−.001	−.001	−.001	−.001	29
30	.003	.003	.003	.004	.004	.004	.004	.004	30
31	−.005	−.006	−.006	−.006	−.006	−.006	−.006	−.006	31
32	.008	.008	.008	.008	.008	.008	.008	.009	32
33	.010	.010	.010	.010	.011	.011	.011	.011	33
34	.012	.012	.012	.013	.013	.013	.013	.014	34
35	.014	.014	.015	.015	.015	.015	.016	.016	35
36	−.016	−.017	−.017	−.017	−.017	−.018	−.018	−.019	36
37	.018	.019	.019	.019	.020	.020	.021	.021	37
38	.020	.021	.021	.022	.022	.023	.023	.023	38
39	.023	.023	.024	.024	.024	.025	.025	.026	39
40	.025	.025	.026	.026	.027	.027	.028	.028	40
41	−.027	−.027	−.028	−.029	−.029	−.030	−.030	−.031	41
42	.029	.030	.030	.031	.031	.032	.033	.033	42
43	.031	.032	.032	.033	.034	.034	.035	.036	43
44	.033	.034	.035	.035	.036	.037	.037	.038	44
45	.035	.036	.037	.038	.038	.039	.040	.041	45
46	−.038	−.038	−.039	−.040	−.041	−.042	−.042	−.043	46
47	.040	.041	.041	.042	.043	.044	.045	.046	47
48	.042	.043	.044	.045	.045	.046	.047	.048	48
49	.044	.045	.046	.047	.048	.049	.050	.050	49
50	.046	.047	.048	.049	.050	.051	.052	.053	50

Degrees of Fahrenheit.	Tenths of Degrees.								Degrees of Fahrenheit.
	24	24.5	25	25.5	26	26.5	27	27.5	
°									°
51	−.048	−.049	−.050	−.051	−.052	−.053	−.054	−.055	51
52	.050	.052	.053	.054	.055	.056	.057	.058	52
53	.053	.054	.055	.056	.057	.058	.059	.060	53
54	.055	.056	.057	.058	.059	.060	.062	.063	54
55	.057	.058	.059	.060	.062	.063	.064	.065	55
56	−.059	−.060	−.061	−.063	−.064	−.065	−.066	−.068	56
57	.061	.062	.064	.065	.066	.068	.069	.070	57
58	.063	.065	.066	.067	.069	.070	.071	.073	58
59	.065	.067	.068	.070	.071	.072	.074	.075	59
60	.068	.069	.070	.072	.073	.075	.076	.077	60
61	−.070	−.071	−.073	−.074	−.075	−.077	−.078	−.080	61
62	.072	.073	.075	.076	.078	.079	.081	.082	62
63	.074	.076	.077	.079	.080	.082	.083	.085	63
64	.076	.078	.079	.081	.082	.084	.086	.087	64
65	.078	.080	.082	.083	.085	.086	.088	.090	65
66	−.080	−.082	−.084	−.085	−.087	−.089	−.090	−.092	66
67	.083	.084	.086	.088	.089	.091	.093	.095	67
68	.085	.086	.088	.090	.092	.094	.095	.097	68
69	.087	.089	.090	.092	.094	.096	.098	.100	69
70	.089	.091	.093	.095	.096	.098	.100	.102	70
71	−.091	−.093	−.095	−.097	−.099	−.101	−.102	−.104	71
72	.093	.095	.097	.099	.101	.103	.105	.107	72
73	.095	.097	.099	.101	.103	.105	.107	.109	73
74	.097	.099	.102	.104	.106	.108	.110	.112	74
75	.100	.102	.104	.106	.108	.110	.112	.114	75
76	−.102	−.104	−.106	−.108	−.110	−.112	−.114	−.117	76
77	.104	.106	.108	.110	.112	.115	117	.119	77
78	.106	.108	.110	.113	.115	.117	.119	.122	78
79	.108	.110	.113	.115	.117	.119	.122	.124	79
80	.110	.113	.115	.117	.119	.122	.124	.126	80
81	−.112	−.115	−.117	−.119	−.122	−.124	−.126	−.129	81
82	.114	.117	.119	.122	.124	.126	.129	.131	82
83	.117	.119	.121	.124	.126	.129	.131	.134	83
84	.119	.121	.124	.126	.129	.131	.134	.136	84
85	.121	.123	.126	.128	.131	.133	.136	.139	85
86	−.123	−.126	−.128	−.131	−.133	−.136	−.138	−.141	86
87	.125	.128	.130	.133	.136	.138	.141	.143	87
88	.127	.130	.133	.135	.138	.141	.143	.146	88
89	.129	.132	.135	.137	.140	.143	.146	.148	89
90	.131	.134	.137	.140	.142	.145	.148	.151	90
91	−.134	−.136	−.139	−.142	−.145	−.148	−.150	−.153	91
92	.136	.139	.141	.144	.147	.150	.153	.156	92
93	.138	.141	.144	.147	.149	.152	.155	.158	93
94	.140	.143	.146	.149	.152	.155	.157	.161	94
95	.142	.145	.148	.151	.154	.157	.160	.163	95
96	−.144	−.147	−.150	−.153	−.156	−.159	−.162	−.165	96
97	.146	.149	.152	.156	.159	.162	.165	.168	97
98	.148	.152	.155	.158	.161	.164	.167	.170	98
99	.151	.154	.157	.160	.163	.166	.169	.173	99
100	.153	.156	.159	.162	.165	.169	.172	.175	100

Degrees of Fahrenheit.	English Inches.							Degrees of Fahrenheit.
	28	28.5	29	29.5	30	30.5	31	
°								°
0	+.072	+.073	+.074	+.076	+.077	+.078	+.080	0
1	.069	.071	.072	.073	.074	.076	.077	1
2	.067	.068	.069	.070	.072	.073	.074	2
3	.064	.065	.067	.068	.069	.070	.071	3
4	.062	.063	.064	.065	.066	.067	.068	4
5	.059	.060	.061	.062	.063	.065	.066	5
6	+.057	+.058	+.059	+.060	+.061	+.062	+.063	6
7	.054	.055	.056	.057	.058	.059	.060	7
8	.052	.053	.054	.054	.055	.056	.057	8
9	.049	.050	.051	.052	.053	.054	.054	9
10	.047	.047	.048	.049	.050	.051	.052	10
11	+.044	+.045	+.046	+.046	+.047	+.048	+.049	11
12	.042	.042	.043	.044	.045	.045	.046	12
13	.039	.040	.040	.041	.042	.043	.043	13
14	.037	.037	.038	.038	.039	.040	.040	14
15	.034	.035	.035	.036	.036	.037	.038	15
16	+.032	+.032	+.033	+.033	+.034	+.034	+.035	16
17	.029	.030	.030	.031	.031	.032	.032	17
18	.026	.027	.027	.028	.028	.029	.029	18
19	.024	.024	.025	.025	.026	.026	.027	19
20	.021	.022	.022	.023	.023	.023	.024	20
21	+.019	+.019	+.020	+.020	+.020	+.021	+.021	21
22	.016	.017	.017	.017	.018	.018	.018	22
23	.014	.014	.014	.015	.015	.015	.015	23
24	.011	.012	.012	.012	.012	.012	.013	24
25	.009	.009	.009	.009	.009	.010	.010	25
26	+.006	+.006	+.007	+.007	+.007	+.007	+.007	26
27	.004	.004	.004	.004	.004	.004	.004	27
28	.001	.001	.001	.001	.001	.001	.001	28
29	−.001	−.001	−.001	−.001	−.001	−.001	−.001	29
30	.004	.004	.004	.004	.004	.004	.004	30
31	−.006	−.006	−.007	−.007	−.007	−.007	−.007	31
32	.009	.009	.009	.009	.009	.010	.010	32
33	.011	.012	.012	.012	.012	.012	.012	33
34	.014	.014	.014	.015	.015	.015	.015	34
35	.016	.017	.017	.017	.018	.018	.018	35
36	−.019	−.019	−.020	−.020	−.020	−.021	−.021	36
37	.021	.022	.022	.022	.023	.023	.024	37
48	.024	.024	.025	.025	.026	.026	.026	38
39	.026	.027	.027	.028	.028	.029	.029	39
40	.029	.029	.030	.030	.031	.031	.032	40
41	−.031	−.032	−.033	−.033	−.034	−.034	−.035	41
42	.034	.034	.035	.036	.036	.037	.037	42
43	.036	.037	.038	.038	.039	.040	.040	43
44	.039	.040	.040	.041	.042	.042	.043	44
45	.041	.042	.043	.044	.044	.045	.046	45
46	−.044	−.045	−.045	−.046	−.047	−.048	−.049	46
47	.046	.047	.048	.049	.050	.051	.051	47
48	.049	.050	.051	.052	.052	.053	.054	48
49	.051	.052	.053	.054	.055	.056	.057	49
50	.054	.055	.056	057	.058	.059	.060	50

Degrees of Fahrenheit.	English Inches.							Degrees of Fahrenheit.
	28	28.5	29	29.5	30	30.5	31	
°								°
51	−.056	−.057	−.058	−.059	−.060	−.061	−.062	51
52	.059	.060	.061	.062	.063	.064	.065	52
53	.061	.063	.064	.065	.066	.067	.068	53
54	.064	.065	.066	.067	.068	.070	.071	54
55	.066	.068	.069	.070	.071	.072	.073	55
56	−.069	−.070	−.071	−.073	−.074	−.075	−.076	56
57	.071	.073	.074	.075	.076	.078	.079	57
58	.074	.075	.077	.078	.079	.081	.082	58
59	.076	.078	.079	.080	.082	.083	.085	59
60	.079	.080	.082	.083	.085	.086	.087	60
61	−.081	−.083	−.084	−.086	−.087	−.089	−.090	61
62	.084	.085	.087	.088	.090	.091	.093	62
63	.086	.088	.089	.091	.093	.094	.096	63
64	.089	.090	.092	.094	.095	.097	.098	64
65	.091	.093	.095	.096	.098	.100	.101	65
66	−.094	−.096	−.097	−.099	−.101	−.102	−.104	66
67	.096	.098	.100	.102	.103	.105	.107	67
68	.099	.101	.102	.104	.106	.108	.109	68
69	.101	.103	.105	.107	.109	.110	.112	69
70	.104	.106	.108	.109	.111	.113	.115	70
71	−.106	−.108	−.110	−.112	−.114	−.116	−.118	71
72	.109	.111	.113	.115	.117	.119	.120	72
73	.111	.113	.115	.117	.119	.121	.123	73
74	.114	.116	.118	.120	.122	.124	.126	74
75	.116	.118	.120	.122	.125	.127	.129	75
76	−.119	−.121	−.123	−.125	−.127	−.129	−.131	76
77	.121	.123	.126	.128	.130	.132	.134	77
78	.124	.126	.128	.130	.133	.135	.137	78
79	.126	.128	.131	.133	.135	.137	.140	79
80	.129	.131	.133	.136	.138	.140	.143	80
81	−.131	−.134	−.136	−.138	−.141	−.143	−.145	81
82	.134	.136	.138	.141	.143	.146	.148	82
83	.136	.139	.141	.143	.146	.148	.151	83
84	.139	.141	.144	.146	.149	.151	.154	84
85	.141	.144	.146	.149	.151	.154	.156	85
86	−.144	−.146	−.149	−.151	−.154	−.156	−.159	86
87	.146	.149	.151	.154	.157	.159	.162	87
88	.149	.151	.154	.157	.159	.162	.165	88
89	.151	.154	.156	.159	.162	.165	.167	89
90	.153	.156	.159	.162	.164	.167	.170	90
91	−.156	−.159	−.162	−.165	−.167	−.170	−.173	91
92	.158	.161	.164	.167	.170	.172	.175	92
93	.161	.164	.167	.170	.172	.175	.178	93
94	.163	.166	.169	.172	.175	.177	.180	94
95	.166	.169	.172	.175	.178	.180	.183	95
96	−.168	−.171	−.174	−.178	−.181	−.183	−.186	96
97	.171	.174	.177	.180	.183	.186	.189	97
98	.173	.176	.179	.183	.186	.188	.191	98
99	.176	.179	.182	.185	.188	.191	.194	99
100	.178	.181	.184	.188	.191	.194	.197	100

TABLE VI.

In most of the common barometers the scale is engraved upon a short plate of brass, fixed upon the wooden frame of the instrument. In such a case, the compound expansion of the two substances can only be guessed at, and the correction to be applied to the observations for reducing them to the freezing point cannot be determined with precision. As a near approximation for such imperfect instruments, the following table, taken from the Instructions of the Royal Society of London, may be used. In this table, the expansion of glass, which is less than that of brass, and greater than that of wood, has been substituted to that of brass, as an approximate value for a scale composed of these last two substances.

VI. CORRECTION TO BE APPLIED TO ENGLISH BAROMETERS, THE SCALES OF WHICH ARE ENGRAVED ON *GLASS*, TO REDUCE THE OBSERVATIONS TO THE FREEZING POINT.

Degrees of Fahrenheit.	Inches.							Degrees of Fahrenheit.
	28.0	**28.5**	**29.0**	**29.5**	**30.0**	**30.5**	**31.0**	
25	+.017	+.017	+.017	+.018	+.018	+.018	+.019	25
30	+.005	+.005	+.005	+.005	+.005	+.005	+.005	30
35	−.007	−.007	−.007	−.008	−.008	−.008	−.008	35
40	−.019	−.020	−.020	−.020	−.021	−.021	−.021	40
45	−.031	−.032	−.032	−.033	−.033	−.034	−.035	45
50	−.043	−.044	−.045	−.046	−.046	−.047	−.048	50
55	−.055	−.056	−.057	−.058	−.059	−.060	−.061	55
60	−.067	−.068	−.069	−.071	−.072	−.074	−.075	60
65	−.079	−.081	−.082	−.083	−.085	−.086	−.088	65
70	−.091	−.093	−.094	−.096	−.098	−.100	−.101	70
75	−.103	−.105	−.106	−.109	−.111	−.114	−.116	75
80	−.115	−.117	−.119	−.121	−.124	−.127	−.130	80
85	−.127	−.129	−.131	−.134	−.137	−.140	−.144	85

VII.

METRICAL BAROMETER.

TABLE

FOR

REDUCING TO THE FREEZING POINT THE BAROMETRICAL COLUMN,

MEASURED BY BRASS SCALES, EXTENDING FROM THE CISTERN TO THE TOP; CALCULATED FROM 260 TO 865 MILLIMETRES, AND FOR EACH DEGREE CENTIGRADE.

By M. T. Delcros.

Table VII.

This table has been calculated by using the following coefficients of dilatation : —

Brass, linear dilatation, from Laplace and Lavoisier for 100° C. = 0.0018782.
Mercury, dilatation in volume, from Dulong and Petit for 100° C. = 0.0180180.
Dilatation of the mercurial column for 100° C. . . . = 0.0161398.
Dilatation of the mercurial column for 1° C. . . . = 0.0001614.

Observed height reduced to freezing point,

$$H = h - h\,(0.0001614). \quad T = h - h\left(\tfrac{T}{6196}\right).$$

The second term of this last formula is given by the table, when the temperature T and the height h of the barometer are known; this correction must be *subtracted* from the observed height h, when the temperature is above freezing point; it is to be *added* when the temperature is below zero, or freezing point.

This table allows the barometrical heights taken at the highest summits, and in the deepest mines, to be corrected.

Examples of Calculation.

	mm.
Barometer, observed height, ...	567.49
Temperature of the barometer, +12°.7.	
Second page, for 10°.0 = 0.912	
for 2.0 = 0.182	
for 0.7 = 0.064	
Total, = 1.158	
Subtractive correction, ...	— 1.16
Barometer at zero,	566.33

	mm.
Barometer, observed height, ...	454.17
Temperature of the barometer, —7°.8.	
First page, for 7°.0 = 0.514	
for 0.8 = 0.059	
Total, = 0.573	
Additive correction, ...	+0.57
Barometer at zero,	454.74

Height of the Barometer.	TEMPERATURE CENTIGRADE.								
	1°	2°	3°	4°	5°	6°	7°	8°	9°
Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.
260	0.042	0.084	0.126	0.168	0.210	0.252	0.294	0.336	0.378
265	0.043	0.086	0.128	0.171	0.214	0.257	0.299	0.342	0.385
270	0.044	0.087	0.131	0.174	0.218	0.261	0.305	0.349	0.392
275	0.044	0.089	0.133	0.178	0.222	0.266	0.311	0.355	0.399
280	0.045	0.090	0.136	0.181	0.226	0.271	0.316	0.362	0.407
285	0.046	0.092	0.138	0.184	0.230	0.276	0.322	0.368	0.414
290	0.047	0.094	0.140	0.187	0.234	0.281	0.328	0.374	0.421
295	0.048	0.095	0.143	0.190	0.238	0.286	0.333	0.381	0.428
300	0.048	0.097	0.145	0.194	0.242	0.291	0.339	0.387	0.436
305	0.049	0.098	0.148	0.197	0.246	0.295	0.345	0.394	0.443
310	0.050	0.100	0.150	0.200	0.250	0.300	0.350	0.400	0.450
315	0.051	0.102	0.152	0.203	0.254	0.305	0.356	0.407	0.458
320	0.052	0.103	0.155	0.207	0.258	0.310	0.361	0.413	0.465
325	0.052	0.105	0.157	0.210	0.262	0.315	0.367	0.420	0.472
330	0.053	0.106	0.160	0.213	0.266	0.320	0.374	0.426	0.479
335	0.054	0.108	0.162	0.216	0.270	0.324	0.379	0.432	0.487
340	0.055	0.110	0.165	0.219	0.274	0.329	0.384	0.439	0.494
345	0.056	0.111	0.167	0.223	0.278	0.334	0.390	0.445	0.501
350	0.056	0.113	0.169	0.226	0.282	0.339	0.395	0.452	0.508
355	0.057	0.115	0.172	0.229	0.286	0.344	0.401	0.458	0.516
360	0.058	0.116	0.174	0.232	0.290	0.349	0.407	0.465	0.523
365	0.059	0.118	0.177	0.236	0.294	0.353	0.412	0.471	0.530
370	0.060	0.119	0.179	0.239	0.299	0.358	0.418	0.478	0.537
375	0.060	0.121	0.182	0.242	0.303	0.363	0.424	0.484	0.545
380	0.061	0.123	0.184	0.245	0.307	0.368	0.429	0.491	0.552
385	0.062	0.124	0.186	0.249	0.311	0.373	0.435	0.497	0.559
390	0.063	0.126	0.189	0.252	0.315	0.378	0.441	0.504	0.566
395	0.064	0.127	0.191	0.255	0.319	0.382	0.446	0.510	0.574
400	0.065	0.129	0.194	0.258	0.323	0.387	0.452	0.516	0.581
405	0.065	0.131	0.196	0.261	0.327	0.392	0.457	0.523	0.588
410	0.066	0.132	0.198	0.265	0.331	0.397	0.463	0.529	0.596
415	0.067	0.134	0.201	0.268	0.335	0.402	0.469	0.536	0.603
420	0.068	0.136	0.203	0.271	0.339	0.407	0.474	0.542	0.610
425	0.068	0.137	0.206	0.274	0.343	0.411	0.480	0.549	0.617
430	0.069	0.139	0.208	0.278	0.347	0.416	0.486	0.555	0.625
435	0.070	0.140	0.211	0.281	0.351	0.421	0.491	0.562	0.632
440	0.071	0.142	0.213	0.284	0.355	0.426	0.497	0.568	0.639
445	0.072	0.144	0.215	0.287	0.359	0.431	0.503	0.574	0.646
450	0.073	0.145	0.218	0.290	0.363	0.436	0.508	0.581	0.654
455	0.073	0.147	0.220	0.294	0.367	0.441	0.514	0.587	0.661
	1°	2°	3°	4°	5°	6°	7°	8°	9°

Height of the Barometer.	TEMPERATURE CENTIGRADE.								
	1°	2°	3°	4°	5°	6°	7°	8°	9°
Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.
460	0.0742	0.1485	0.2227	0.2970	0.371	0.445	0.520	0.594	0.668
465	0.0750	0.1501	0.2251	0.3002	0.375	0.450	0.525	0.600	0.675
470	0.0759	0.1517	0.2276	0.3034	0.379	0.455	0.531	0.607	0.683
475	0.0767	0.1533	0.2300	0.3066	0.383	0.460	0.537	0.613	0.690
480	0.0775	0.1549	0.2324	0.3099	0.387	0.465	0.542	0.620	0.697
485	0.0783	0.1565	0.2348	0.3131	0.391	0.470	0.548	0.626	0.704
490	0.0791	0.1582	0.2373	0.3163	0.395	0.474	0.554	0.633	0.712
495	0.0800	0.1598	0.2397	0.3195	0.399	0.479	0.559	0.639	0.719
500	0.0807	0.1614	0.2421	0.3228	0.403	0.484	0.565	0.646	0.726
505	0.0815	0.1630	0.2445	0.3260	0.407	0.489	0.570	0.652	0.734
510	0.0823	0.1646	0.2469	0.3293	0.412	0.494	0.576	0.658	0.741
515	0.0831	0.1662	0.2493	0.3325	0.416	0.499	0.582	0.665	0.748
520	0.0839	0.1679	0.2518	0.3357	0.420	0.504	0.587	0.671	0.755
525	0.0847	0.1695	0.2542	0.3389	0.424	0.508	0.593	0.678	0.763
530	0.0855	0.1711	0.2566	0.3422	0.428	0.513	0.599	0.684	0.770
535	0.0863	0.1727	0.2590	0.3454	0.432	0.518	0.604	0.691	0.777
540	0.0872	0.1743	0.2615	0.3486	0.436	0.523	0.610	0.697	0.784
545	0.0879	0.1759	0.2639	0.3518	0.440	0.528	0.616	0.704	0.792
550	0.0888	0.1775	0.2663	0.3551	0.444	0.533	0.621	0.710	0.799
555	0.0896	0.1791	0.2687	0.3583	0.448	0.537	0.627	0.717	0.806
560	0.0904	0.1808	0.2712	0.3615	0.452	0.542	0.633	0.723	0.813
565	0.0912	0.1824	0.2736	0.3647	0.456	0.547	0.638	0.730	0.821
570	0.0920	0.1840	0.2760	0.3680	0.460	0.552	0.644	0.736	0.828
575	0.0928	0.1856	0.2784	0.3712	0.464	0.557	0.650	0.742	0.835
580	0.0936	0.1872	0.2808	0.3744	0.468	0.562	0.655	0.749	0.842
585	0.0944	0.1888	0.2833	0.3777	0.472	0.566	0.661	0.755	0.850
590	0.0952	0.1904	0.2857	0.3809	0.476	0.571	0.667	0.762	0.857
595	0.0960	0.1921	0.2881	0.3841	0.480	0.576	0.672	0.768	0.864
600	0.0968	0.1937	0.2905	0.3874	0.484	0.581	0.678	0.775	0.872
605	0.0976	0.1953	0.2929	0.3906	0.488	0.586	0.683	0.781	0.879
610	0.0985	0.1969	0.2954	0.3938	0.492	0.591	0.689	0.788	0.886
615	0.0993	0.1985	0.2978	0.3970	0.496	0.595	0.695	0.794	0.893
620	0.1001	0.2001	0.3002	0.4003	0.500	0.600	0.700	0.800	0.901
625	0.1009	0.2017	0.3026	0.4035	0.504	0.605	0.706	0.807	0.908
630	0.1017	0.2034	0.3050	0.4067	0.508	0.610	0.712	0.813	0.915
635	0.1025	0.2050	0.3074	0.4099	0.512	0.615	0.717	0.820	0.922
640	0.1033	0.2066	0.3099	0.4132	0.516	0.620	0.723	0.826	0.930
645	0.1041	0.2082	0.3123	0.4164	0.520	0.625	0.729	0.833	0.937
650	0.1049	0.2098	0.3147	0.4196	0.524	0.629	0.734	0.839	0.944
655	0.1057	0.2114	0.3172	0.4229	0.529	0.634	0.740	0.846	0.951
660	0.1065	0.2130	0.3196	0.4261	0.533	0.639	0.746	0.852	0.959
	1°	2°	3°	4°	5°	6°	7°	8°	9°

Height of the Barometer.	TEMPERATURE CENTIGRADE.								
	1°	2°	3°	4°	5°	6°	7°	8°	9°
Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.
665	0.1073	0.2146	0.3220	0.4293	0.537	0.644	0.751	0.859	0.966
670	0.1081	0.2163	0.3244	0.4326	0.541	0.649	0.757	0.865	0.973
675	0.1089	0.2179	0.3268	0.4358	0.545	0.654	0.763	0.871	0.980
680	0.1097	0.2195	0.3292	0.4390	0.549	0.658	0.768	0.878	0.988
685	0.1106	0.2211	0.3317	0.4423	0.553	0.663	0.774	0.884	0.995
690	0.1114	0.2227	0.3341	0.4455	0.557	0.668	0.780	0.891	1.002
695	0.1122	0.2233	0.3365	0.4487	0.561	0.673	0.785	0.897	1.010
700	0.1130	0.2260	0.3389	0.4520	0.565	0.678	0.791	0.904	1.017
705	0.1138	0.2276	0.3414	0.4552	0.569	0.683	0.797	0.910	1.024
710	0.1146	0.2292	0.3438	0.4584	0.573	0.688	0.802	0.917	1.031
715	0.1154	0.2308	0.3462	0.4616	0.577	0.691	0.808	0.923	1.039
720	0.1162	0.2324	0.3486	0.4648	0.581	0.697	0.813	0.930	1.046
725	0.1170	0.2340	0.3510	0.4680	0.585	0.702	0.819	0.936	1.053
730	0.1178	0.2356	0.3535	0.4713	0.589	0.707	0.825	0.943	1.060
735	0.1186	0.2372	0.3559	0.4745	0.593	0.712	0.830	0.949	1.068
740	0.1104	0.2389	0.3583	0.4777	0.597	0.717	0.836	0.955	1.075
745	0.1202	0.2405	0.3607	0.4809	0.601	0.721	0.842	0.962	1.082
750	0.1210	0.2421	0.3631	0.4842	0.605	0.726	0.847	0.968	1.089
755	0.1218	0.2437	0.3655	0.4874	0.609	0.731	0.853	0.975	1.097
760	0.1227	0.2453	0.3680	0.4906	0.613	0.736	0.859	0.981	1.104
765	0.1235	0.2469	0.3704	0.4939	0.617	0.741	0.864	0.988	1.111
770	0.1243	0.2486	0.3728	0.4971	0.621	0.746	0.870	0.994	1.118
775	0.1251	0.2502	0.3752	0.5003	0.625	0.750	0.876	1.001	1.126
780	0.1259	0.2518	0.3777	0.5036	0.629	0.755	0.881	1.007	1.133
785	0.1267	0.2534	0.3801	0.5068	0.633	0.760	0.888	1.014	1.140
790	0.1275	0.2550	0.3825	0.5100	0.637	0.765	0.893	1.020	1.148
795	0.1283	0.2566	0.3849	0.5132	0.641	0.770	0.898	1.026	1.155
800	0.1291	0.2582	0.3874	0.5165	0.646	0.775	0.904	1.033	1.162
805	0.1299	0.2598	0.3898	0.5197	0.650	0.780	0.909	1.039	1.169
810	0.1307	0.2615	0.3922	0.5230	0.654	0.784	0.915	1.046	1.177
815	0.1315	0.2621	0.3946	0.5262	0.658	0.789	0.921	1.052	1.184
820	0.1323	0.2647	0.3970	0.5294	0.662	0.794	0.926	1.059	1.191
825	0.1331	0.2653	0.3994	0.5326	0.666	0.799	0.932	1.065	1.198
830	0.1340	0.2679	0.4019	0.5358	0.670	0.804	0.938	1.072	1.206
835	0.1348	0.2695	0.4043	0.5391	0.674	0.809	0.943	1.078	1.213
840	0.1356	0.2712	0.4067	0.5423	0.678	0.813	0.949	1.085	1.220
845	0.1364	0.2728	0.4091	0.5455	0.682	0.818	0.955	1.091	1.227
850	0.1372	0.2744	0.4116	0.5488	0.686	0.823	0.960	1.097	1.235
855	0.1380	0.2760	0.4140	0.5520	0.690	0.828	0.966	1.104	1.242
860	0.1388	0.2776	0.4164	0.5552	0.694	0.833	0.972	1.110	1.249
865	0.1396	0.2792	0.4188	0.5584	0.698	0.838	0.977	1.117	1.256
	1°	2°	3°	4°	5°	6°	7°	8°	9°

VIII.

METRICAL BAROMETER.

TABLE

FOR

REDUCING TO THE FREEZING POINT THE BAROMETRICAL COLUMN,

MEASURED BY BRASS SCALES, EXTENDING FROM THE CISTERN TO THE TOP; CALCULATED FOR THE HEIGHTS BETWEEN 650 AND 800 MILLIMETRES, AND FOR EVERY TENTH OF A DEGREE, FROM 0° TO + AND — 35° CENTIGRADE.

By M. T. Haeghens.

This table has been calculated by using the same coefficients of dilatation as in the preceding table, viz.: —

Brass, linear dilatation, from Laplace and Lavoisier for 100° C. = 0.0018782.
Mercury, dilatation in volume, from Dulong and Petit for 100° C. = 0.0180180.
Dilatation of the mercurial column for 100° C. . . . = 0.0161398.
Dilatation of the mercurial column for 1° C. . . . = 0.0001614.

This table, calculated for the reduction of long series of meteorological observations, gives immediately the value of the correction for each tenth of a degree up to 35° C. above, and down to 35° C. below, the freezing point, and for mercurial columns of from 650 to 800 millimetres.

Examples of Calculation.

	mm.
Barometer, observed height, ...	754.17

Temperature of the attached thermometer, +17°.8.

For finding the correction, seek in the horizontal column, headed *barometer*, at the head of the pages, the corresponding height of the barometer; it will be found, p. 24, barometer 755$^{mm.}$ (from 752.50 to 757.50); next seek in the first vertical column, containing the temperatures, 17°, follow then horizontally this line as far as the column of 8 tenths, and you find there 2.17 millimetres, which is the correction, or the quantity to be subtracted for reducing the observed height to zero. We have thus: —

	mm.
Observed height, ...	754.17
Subtractive correction for +17°.8 = . . .	— 2.17
Barometer at zero,	752.00

If the temperature is below zero, the correction will be additive.

	mm.
Observed height, ...	729.72

Temperature of the attached thermometer, —8°.4.

Additive correction, ...	+0.99
Barometer at zero,	730.71

Centigrade Degrees.	BAROMETER: 650mm. (from 647.51 to 652.50). Tenths of Degrees.									
	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.
°	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.
0	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09
1	0.11	0.12	0.13	0.14	0.15	0.16	0.17	0.18	0.19	0.20
2	0.21	0.22	0.23	0.24	0.25	0.26	0.27	0.28	0.29	0.30
3	0.32	0.33	0.34	0.35	0.36	0.37	0.38	0.39	0.40	0.41
4	0.42	0.43	0.44	0.45	0.46	0.47	0.48	0.49	0.50	0.51
5	0.53	0.54	0.55	0.56	0.57	0.58	0.59	0.60	0.61	0.62
6	0.63	0.64	0.65	0.66	0.67	0.68	0.69	0.70	0.71	0.72
7	0.73	0.75	0.76	0.77	0.78	0.79	0.80	0.81	0.82	0.83
8	0.84	0.85	0.86	0.87	0.88	0.89	0.90	0.91	0.92	0.93
9	0.94	0.96	0.97	0.98	0.99	1.00	1.01	1.02	1.03	1.04
10	1.05	1.06	1.07	1.08	1.09	1.10	1.11	1.12	1.13	1.14
11	1.15	1.17	1.18	1.19	1.20	1.21	1.22	1.23	1.24	1.25
12	1.26	1.27	1.28	1.29	1.30	1.31	1.32	1.33	1.34	1.35
13	1.36	1.37	1.39	1.40	1.41	1.42	1.43	1.44	1.45	1.46
14	1.47	1.48	1.49	1.50	1.51	1.52	1.53	1.54	1.55	1.56
15	1.57	1.58	1.60	1.61	1.62	1.63	1.64	1.65	1.66	1.67
16	1.68	1.69	1.70	1.71	1.72	1.73	1.74	1.75	1.76	1.77
17	1.78	1.79	1.81	1.82	1.83	1.84	1.85	1.86	1.87	1.88
18	1.89	1.90	1.91	1.92	1.93	1.94	1.95	1.96	1.97	1.98
19	1.99	2.00	2.01	2.03	2.04	2.05	2.06	2.07	2.08	2.09
20	2.10	2.11	2.12	2.13	2.14	2.15	2.16	2.17	2.18	2.19
21	2.20	2.21	2.22	2.24	2.25	2.26	2.27	2.28	2.29	2.30
22	2.31	2.32	2.33	2.34	2.35	2.36	2.37	2.38	2.39	2.40
23	2.41	2.42	2.43	2.44	2.46	2.47	2.48	2.49	2.50	2.51
24	2.52	2.53	2.54	2.55	2.56	2.57	2.58	2.59	2.60	2.61
25	2.62	2.63	2.64	2.65	2.67	2.68	2.69	2.70	2.71	2.72
26	2.73	2.84	2.75	2.76	2.77	2.78	2.79	2.80	2.81	2.82
27	2.83	2.84	2.85	2.86	2.88	2.89	2.90	2.91	2.92	2.93
28	2.94	2.95	2.96	2.97	2.98	2.99	3.00	3.01	3.02	3 03
29	3.04	3.05	3.06	3.07	3.08	3.10	3.11	3.12	3.13	3.14
30	3.15	3.16	3.17	3.18	3.19	3.20	3.21	3.22	3.23	3.24
31	3.25	3.26	3.27	3.28	3.29	3.31	3.32	3.33	3.34	3.35
32	3.36	3.37	3.38	3.39	3.40	3.41	3.42	3.43	3.44	3.45
33	3.46	3.47	3.48	3.49	3.50	3.52	3.53	3.54	3.55	3.56
34	3.57	3 58	3.59	3.60	3.61	3.62	3.63	3.64	3.65	3.66
35	3.67	3.68	3.69	3.70	3.71	3.72	3.74	3.75	3.76	3.77
	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.

Centigrade Degrees.	BAROMETER: 655mm. (from 652.51 to 657.50). Tenths of Degrees.									
	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.
°	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.
0	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.09	0.10
1	0.11	0.12	0.13	0.14	0.15	0.16	0.17	0.18	0.19	0.20
2	0.21	0.22	0.23	0.24	0.25	0.26	0.28	0.29	0.30	0.31
3	0.32	0.33	0.34	0.35	0.36	0.37	0.38	0.39	0.40	0.41
4	0.42	0.43	0.44	0.46	0.47	0.48	0.49	0.50	0.51	0.52
5	0.53	0.54	0.55	0.56	0.57	0.58	0.59	0.60	0.61	0.62
6	0.63	0.65	0.66	0.67	0.68	0.69	0.70	0.71	0.72	0.73
7	0.74	0.75	0.76	0.77	0.78	0.79	0.80	0.81	0.83	0.84
8	0.85	0.86	0.87	0.88	0.89	0.90	0.91	0.92	0.93	0.94
9	0.95	0.96	0.97	0.98	0.99	1.00	1.02	1.03	1.04	1.05
10	1.06	1.07	1.08	1.09	1.10	1.11	1.12	1.13	1.14	1.15
11	1.16	1.17	1.18	1.20	1.21	1.22	1.23	1.24	1.25	1.26
12	1.27	1.28	1.29	1.30	1.31	1.32	1.33	1.34	1.35	1.36
13	1.37	1.39	1.40	1.41	1.42	1.43	1.44	1.45	1.46	1.47
14	1.48	1.49	1.50	1.51	1.52	1.53	1.54	1.55	1.57	1.58
15	1.59	1.60	1.61	1.62	1.63	1.64	1.65	1.66	1.67	1.68
16	1.69	1.70	1.71	1.72	1.73	1.74	1.76	1.77	1.78	1.79
17	1.80	1.81	1.82	1.83	1.84	1.85	1.86	1.87	1.88	1.89
18	1.90	1.91	1.92	1.94	1.95	1.96	1.97	1.98	1.99	2.00
19	2.01	2.02	2.03	2.04	2.05	2.06	2.07	2.08	2.09	2.10
20	2.11	2.13	2.14	2.15	2.16	2.17	2.18	2.19	2.20	2.21
21	2.22	2.23	2.24	2.25	2.26	2.27	2.28	2.29	2.31	2.32
22	2.33	2.34	2.35	2.36	2.37	2.38	2.39	2.40	2.41	2.42
23	2.43	2.44	2.45	2.46	2.47	2.48	2.50	2.51	2.52	2.53
24	2.54	2.55	2.56	2.57	2.58	2.59	2.60	2.61	2.62	2.63
25	2.64	2.65	2.66	2.68	2.69	2.70	2.71	2.72	2.73	2.74
26	2.75	2.76	2.77	2.78	2.79	2.80	2.81	2.82	2.83	2.84
27	2.85	2.87	2.88	2.89	2.90	2.91	2.92	2.93	2.94	2.95
28	2.96	2.97	2.98	2.99	3.00	3.01	3.02	3.03	3.05	3.06
29	3.07	3.08	3.09	3.10	3.11	3.12	3.13	3.14	3.15	3.16
30	3.17	3.18	3.19	3.20	3.21	3.22	3.24	3.25	3.26	3.27
31	3.28	3.29	3.30	3.31	3.32	3.33	3.34	3.35	3.36	3.37
32	3.38	3.39	3.40	3.42	3.43	3.44	3.45	3.46	3.47	3.48
33	3.49	3.50	3.51	3.52	3.53	3.54	3.55	3.56	3.57	3.58
34	3.59	3.61	3.62	3.63	3.64	3.65	3.66	3.67	3.68	3.69
35	3.70	3.71	3.72	3.73	3.74	3.75	3.76	3.77	3.79	3.80
	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.

BAROMETER : 660mm. (from 657.51 to 662.50).

Centigrade Degrees.	Tenths of Degrees.									
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**
°	Millim.	Millim.	Millim.	Millim.	Millim	Millim.	Millim.	Millim.	Millim.	Millim.
0	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.08	0.09	0.10
1	0.11	0.12	0.13	0.14	0.15	0.16	0.17	0.18	0.19	0.20
2	0.21	0.22	0.23	0.25	0.26	0.27	0.28	0.29	0.30	0.31
3	0.32	0.33	0.34	0.35	0.36	0.37	0.38	0.39	0.41	0.42
4	0.43	0.44	0.45	0.46	0.47	0.48	0.49	0.50	0.51	0.52
5	0.53	0.54	0.55	0.57	0.58	0.59	0.60	0.61	0.62	0.63
6	0.64	0.65	0.66	0.67	0.68	0.69	0.70	0.71	0.72	0.74
7	0.75	0.76	0.77	0.78	0.79	0.80	0.81	0.82	0.83	0.84
8	0.85	0.86	0.87	0.88	0.90	0.91	0.92	0.93	0.94	0.95
9	0.96	0.97	0.98	0.99	1.00	1.01	1.02	1.03	1.04	1.06
10	1.07	1.08	1.09	1.10	1.11	1.12	1.13	1.14	1.15	1.16
11	1.17	1.18	1.19	1.20	1.21	1.23	1.24	1.25	1.26	1.27
12	1.28	1.29	1.30	1.31	1.32	1.33	1.34	1.35	1.36	1.37
13	1.39	1.40	1.41	1.42	1.43	1.44	1.45	1.46	1.47	1.48
14	1.49	1.50	1.51	1.52	1.53	1.55	1.56	1.57	1.58	1.59
15	1.60	1.61	1.62	1.63	1.64	1.65	1.66	1.67	1.68	1.69
16	1.70	1.72	1.73	1.74	1.75	1.76	1.77	1.78	1.79	1.80
17	1.81	1.82	1.83	1.84	1.85	1.86	1.88	1.89	1.90	1.91
18	1.92	1.93	1.94	1.95	1.96	1.97	1.98	1.99	2.00	2.01
19	2.02	2.04	2.05	2.06	2.07	2.08	2.09	2.10	2.11	2.12
20	2.13	2.14	2.15	2.16	2.17	2.18	2.19	2.21	2.22	2.23
21	2.24	2.25	2.26	2.27	2.28	2.29	2.30	2.31	2.32	2.33
22	2.34	2.35	2.37	2.38	2.39	2.40	2.41	2.42	2.43	2.44
23	2.45	2.46	2.47	2.48	2.49	2.50	2.51	2.53	2.54	2.55
24	2.56	2.57	2.58	2.59	2.60	2.61	2.62	2.63	2.64	2.65
25	2.66	2.67	2.68	2.70	2.71	2.72	2.73	2.74	2.75	2.76
26	2.77	2.78	2.79	2.80	2.81	2.82	2.83	2.84	2.86	2.87
27	2.88	2.89	2.90	2.91	2.92	2.93	2.94	2.95	2.96	2.97
28	2.98	2.99	3.00	3.02	3.03	3.04	3.05	3.06	3.07	3.08
29	3.09	3.10	3.11	3.12	3.13	3.14	3.15	3.16	3.17	3.19
30	3.20	3.21	3.22	3.23	3.24	3.25	3.26	3.27	3.28	3.29
31	3.30	3.31	3.32	3.33	3.35	3.36	3.37	3.38	3.39	3.40
32	3.41	3.42	3.43	3.44	3.45	3.46	3.47	3.48	3.49	3.51
33	3.52	3.53	3.54	3.55	3.56	3.57	3.58	3.59	3.60	3.61
34	3.62	3.63	3.64	3.65	3.66	3.68	3.69	3.70	3.71	3.72
35	3.73	3.74	3.75	3.76	3.77	3.78	3.79	3.80	3.81	3.82
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**

BAROMETER : 665mm. (from 662.51 to 667.50).

Centigrade Degrees.	Tenths of Degrees.									
	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.
°	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.
0	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.08	0.09	0.10
1	0.11	0.12	0.13	0.14	0.15	0.16	0.17	0.18	0.19	0.20
2	0.22	0.23	0.24	0.25	0.26	0.27	0.28	0.29	0.30	0.31
3	0.32	0.33	0.34	0.35	0.37	0.38	0.39	0.40	0.41	0.42
4	0.43	0.44	0.45	0.46	0.47	0.48	0.49	0.51	0.52	0.53
5	0.54	0.55	0.56	0.57	0.58	0.59	0.60	0.61	0.62	0.63
6	0.64	0.66	0.67	0.68	0.69	0.70	0.71	0.72	0.73	0.74
7	0.75	0.76	0.77	0.78	0.79	0.81	0.82	0.83	0.84	0.85
8	0.86	0.87	0.88	0.89	0.90	0.91	0.92	0.93	0.95	0.96
9	0.97	0.98	0.99	1.00	1.01	1.02	1.03	1.04	1.05	1.06
10	1.07	1.08	1.10	1.11	1.12	1.13	1.14	1.15	1.16	1.17
11	1.18	1.19	1.20	1.21	1.22	1.23	1.25	1.26	1.27	1.28
12	1.29	1.30	1.31	1.32	1.33	1.34	1.35	1.36	1.37	1.39
13	1.40	1.41	1.42	1.43	1.44	1.45	1.46	1.47	1.48	1.49
14	1.50	1.51	1.52	1.54	1.55	1.56	1.57	1.58	1.59	1.60
15	1.61	1.62	1.63	1.64	1.65	1.66	1.67	1.69	1.70	1.71
16	1.72	1.73	1.74	1.75	1.76	1.77	1.78	1.79	1.80	1.81
17	1.83	1.84	1.85	1.86	1.87	1.88	1.89	1.90	1.91	1.92
18	1.93	1.94	1.95	1.96	1.98	1.99	2.00	2.01	2.02	2.03
19	2.04	2.05	2.06	2.07	2.08	2.09	2.10	2.11	2.13	2.14
20	2.15	2.16	2.17	2.18	2.19	2.20	2.21	2.22	2.23	2.24
21	2.25	2.27	2.28	2.29	2.30	2.31	2.32	2.33	2.34	2.35
22	2.36	2.37	2.38	2.39	2.40	2.42	2.43	2.44	2.45	2.46
23	2.47	2.48	2.49	2.50	2.51	2.52	2.53	2.54	2.56	2.57
24	2.58	2.59	2.60	2.61	2.62	2.63	2.64	2.65	2.66	2.67
25	2.68	2.69	2.71	2.72	2.73	2.74	2.75	2.76	2.77	2.78
26	2.79	2.80	2.81	2.82	2.83	2.84	2.86	2.87	2.88	2.89
27	2.90	2.91	2.92	2.93	2.94	2.95	2.96	2.97	2.98	3.00
28	3.01	3.02	3.03	3.04	3.05	3.06	3.07	3.08	3.09	3.10
29	3.11	3.12	3.13	3.15	3.16	3.17	3.18	3.19	3.20	3.21
30	3.22	3.23	3.24	3.25	3.26	3.27	3.28	3.30	3.31	3.32
31	3.33	3.34	3.35	3.36	3.37	3.38	3.39	3.40	3.41	3.42
32	3.44	3.45	3.46	3.47	3.48	3.49	3.50	3.51	3.52	3.53
33	3.54	3.55	3.56	3.57	3.59	3.60	3.61	3.62	3.63	3.64
34	3.65	3.66	3.67	3.68	3.69	3.70	3.71	3.72	3.74	3.75
35	3.76	3.77	3.78	3.79	3.80	3.81	3.82	3.83	3.84	3.85
	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.

BAROMETER : 670$^{mm.}$ (from 667.51 to 672 50.)

Centigrade Degrees.	Tenths of Degrees.									
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**
	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.
0	0.00	0.01	0.02	0.03	0.04	0.05	0.07	0.08	0.09	0.10
1	0.11	0.12	0.13	0.14	0.15	0.16	0.17	0.18	0.20	0.21
2	0.22	0.23	0.24	0.25	0.26	0.27	0.28	0.29	0.30	0.31
3	0.32	0.34	0.35	0.36	0.37	0.38	0.39	0.40	0.41	0.42
4	0.43	0.44	0.45	0.47	0.48	0.49	0.50	0.51	0.52	0.53
5	0.54	0.55	0.56	0.57	0.58	0.60	0.61	0.62	0.63	0.64
6	0.65	0.66	0.67	0.68	0.69	0.70	0.71	0.73	0.74	0.75
7	0.76	0.77	0.78	0.79	0.80	0.81	0.82	0.83	0.84	0.85
8	0.87	0.88	0.89	0.90	0.91	0.92	0.93	0.94	0.95	0.96
9	0.97	0.98	1.00	1.01	1.02	1.03	1.04	1.05	1.06	1.07
10	1.08	1.09	1.10	1.11	1.13	1.14	1.15	1.16	1.17	1.18
11	1.19	1.20	1.21	1.22	1.23	1.24	1.25	1.27	1.28	1.29
12	1.30	1.31	1.32	1.33	1.34	1.35	1.36	1.37	1.38	1.40
13	1.41	1.42	1.43	1.44	1.45	1.46	1.47	1.48	1.49	1.50
14	1.51	1.53	1.54	1.55	1.56	1.57	1.58	1.59	1.60	1.61
15	1.62	1.63	1.64	1.66	1.67	1.68	1.69	1.70	1.71	1.72
16	1.73	1.74	1.75	1.76	1.77	1.78	1.80	1.81	1.82	1.83
17	1.84	1.85	1.86	1.87	1.88	1.89	1.90	1.91	1.92	1.94
18	1.95	1.96	1.97	1.98	1.99	2.00	2.01	2.02	2.03	2.04
19	2.06	2.07	2.08	2.09	2.10	2.11	2.12	2.13	2.14	2.15
20	2.16	2.17	2.18	2.20	2.21	2.22	2.23	2.24	2.25	2.26
21	2.27	2.28	2.29	2.30	2.31	2.33	2.34	2.35	2.36	2.37
22	2.38	2.39	2.40	2.41	2.42	2.43	2.44	2.46	2.47	2.48
23	2.49	2.50	2.51	2.52	2.53	2.54	2.55	2.56	2.57	2.59
24	2.60	2.61	2.62	2.63	2.64	2.65	2.66	2.67	2.68	2.69
25	2.70	2.71	2.73	2.74	2.75	2.76	2.77	2.78	2.79	2.80
26	2.81	2.82	2.83	2.84	2.86	2.87	2.88	2.89	2.90	2.91
27	2.92	2.93	2.94	2.95	2.96	2.97	2.99	3.00	3.01	3.02
28	3.03	3.04	3.05	3.06	3.07	3.08	3.09	3.10	3.11	3.13
29	3.14	3.15	3.16	3.17	3.18	3.19	3.20	3.21	3.22	3.23
30	3.24	3.26	3.27	3.28	3.29	3.30	3.31	3.32	3.33	3.34
31	3.35	3.36	3.37	3.39	3.40	3.41	3.42	3.43	3.44	3.45
32	3.46	3.47	3.48	3.49	3.50	3.52	3.53	3.54	3.55	3.56
33	3.57	3.58	3.59	3.60	3.61	3.62	3.63	3.64	3.66	3.67
34	3.68	3.69	3.70	3.71	3.72	3.73	3.74	3.75	3.76	3 77
35	3.79	3.80	3.81	3.82	3.83	3.84	3 85	3.86	3.87	3.88
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**

BAROMETER : 675mm. (from 672.51 to 677.50).

Centigrade Degrees.	Tenths of Degrees.									
	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.
°	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.
0	0.00	0.01	0.02	0.03	0.04	0.05	0.07	0.08	0.09	0.10
1	0.11	0.12	0.13	0.14	0.15	0.16	0.17	0.19	0.20	0.21
2	0.22	0.23	0.24	0.25	0.26	0.27	0.28	0.29	0.31	0.32
3	0.33	0.34	0.35	0.36	0.37	0.38	0.39	0.40	0.41	0.42
4	0.44	0.45	0.46	0.47	0.48	0.49	0.50	0.51	0.52	0.53
5	0.54	0.56	0.57	0.58	0.59	0.60	0.61	0.62	0.63	0.64
6	0.65	0.66	0.68	0.69	0.70	0.71	0.72	0.73	0.74	0.75
7	0.76	0.77	0.78	0.80	0.81	0.82	0.83	0.84	0.85	0.86
8	0.87	0.88	0.89	0.90	0.92	0.93	0.94	0.95	0.96	0.97
9	0.98	0.99	1.00	1.01	1.02	1.03	1.05	1.06	1.07	1.08
10	1.09	1.10	1.11	1.12	1.13	1.14	1.15	1.17	1.18	1.19
11	1.20	1.21	1.22	1.23	1.24	1.25	1.26	1.27	1.29	1.30
12	1.31	1.32	1.33	1.34	1.35	1.36	1.37	1.38	1.39	1.41
13	1.42	1.43	1.44	1.45	1.46	1.47	1.48	1.49	1.50	1.51
14	1.53	1.54	1.55	1.56	1.57	1.58	1.59	1.60	1.61	1.62
15	1.63	1.65	1.66	1.67	1.68	1.69	1.70	1.71	1.72	1.73
16	1.74	1.75	1.76	1.78	1.79	1.80	1.81	1.82	1.83	1.84
17	1.85	1.86	1.87	1.88	1.90	1.91	1.92	1.93	1.94	1.95
18	1.96	1.97	1.98	1.99	2.00	2.02	2.03	2.04	2.05	2.06
19	2.07	2.08	2.09	2.10	2.11	2.12	2.14	2.15	2.16	2.17
20	2.18	2.19	2.20	2.21	2.22	2.23	2.24	2.26	2.27	2.28
21	2.29	2.30	2.31	2.32	2.33	2.34	2.35	2.36	2.38	2.39
22	2.40	2.41	2.42	2.43	2.44	2.45	2.46	2.47	2.48	2.49
23	2.51	2.52	2.53	2.54	2.55	2.56	2.57	2.58	2.59	2.60
24	2.61	2.63	2.64	2.65	2.66	2.67	2.68	2.69	2.70	2.71
25	2.72	2.73	2.75	2.76	2.77	2.78	2.79	2.80	2.81	2.82
26	2.83	2.84	2.85	2.87	2.88	2.89	2.90	2.91	2.92	2.93
27	2.94	2.95	2.96	2.97	2.99	3.00	3.01	3.02	3.03	3.04
28	3.05	3.06	3.07	3.08	3.09	3.10	3.12	3.13	3.14	3.15
29	3.16	3.17	3.18	3.19	3.20	3.21	3.22	3.24	3.25	3.26
30	3.27	3.28	3.29	3.30	3.31	3.32	3.33	3.34	3.36	3.37
31	3.38	3.39	3.40	3.41	3.42	3.43	3.44	3.45	3.46	3.48
32	3.49	3.50	3.51	3.52	3.53	3.54	3.55	3.56	3.57	3.58
33	3.60	3.61	3.62	3.63	3.64	3.65	3.66	3.67	3.68	3.69
34	3.70	3.72	3.73	3.74	3.75	3.76	3.77	3.78	3.79	3.80
35	3.81	3.82	3.83	3.85	3.86	3.87	3.88	3.89	3.90	3.91
	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.

Centigrade Degrees.	BAROMETER : 680mm. (from 677.51 to 682.50). Tenths of Degrees.									
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**
°	Millim.	Millim.	Millim.	Millim.	Millim	Millim.	Millim.	Millim.	Millim.	Millim.
0	0.00	0.01	0.02	0.03	0.04	0.05	0.07	0.08	0.09	0.10
1	0.11	0.12	0.13	0.14	0.15	0.16	0.18	0.19	0.20	0.21
2	0.22	0.23	0.24	0.25	0.26	0.27	0.29	0.30	0.31	0.32
3	0.33	0.34	0.35	0.36	0.37	0.38	0.40	0.41	0.42	0.43
4	0.44	0.45	0.46	0.47	0.48	0.49	0.50	0.52	0.53	0.54
5	0.55	0.56	0.57	0.58	0.59	0.60	0.61	0.63	0.64	0.65
6	0.66	0.67	0.68	0.69	0.70	0.71	0.72	0.74	0.75	0.76
7	0.77	0.78	0.79	0.80	0.81	0.82	0.83	0.85	0.86	0.87
8	0.88	0.89	0.90	0.91	0.92	0.93	0.94	0.95	0.97	0.98
9	0.99	1.00	1.01	1.02	1.03	1.04	1.05	1.06	1.08	1.09
10	1.10	1.11	1.12	1.13	1.14	1.15	1.16	1.17	1.19	1.20
11	1.21	1.22	1.23	1.24	1.25	1.26	1.27	1.28	1.30	1.31
12	1.32	1.33	1.34	1.35	1.36	1.37	1.38	1.39	1.40	1.42
13	1.43	1.44	1.45	1.46	1.47	1.48	1.49	1.50	1.51	1.53
14	1.54	1.55	1.56	1.57	1.58	1.59	1.60	1.61	1.62	1.64
15	1.65	1.66	1.67	1.68	1.69	1.70	1.71	1.72	1.73	1.75
16	1.76	1.77	1.78	1.79	1.80	1.81	1.82	1.83	1.84	1.85
17	1.87	1.88	1.89	1.90	1.91	1.92	1.93	1.94	1.95	1.96
18	1.98	1.99	2.00	2.01	2.02	2.03	2.04	2.05	2.06	2.07
19	2.09	2.10	2.11	2.12	2.13	2.14	2.15	2.16	2.17	2.18
20	2.20	2.21	2.22	2.23	2.24	2.25	2.26	2.27	2.28	2.29
21	2.30	2.32	2.33	2.34	2.35	2.36	2.37	2.38	2.39	2.40
22	2.41	2.43	2.44	2.45	2.46	2.47	2.48	2.49	2.50	2.51
23	2.52	2.54	2.55	2.56	2.57	2.58	2.59	2.60	2.61	2.62
24	2.63	2.65	2.66	2.67	2.68	2.69	2.70	2.71	2.72	2.73
25	2.74	2.75	2.77	2.78	2.79	2.80	2.81	2.82	2.83	2.84
26	2.85	2.86	2.88	2.89	2.90	2.91	2.92	2.93	2.94	2.95
27	2.96	2.97	2.99	3.00	3.01	3.02	3.03	3.04	3.05	3.06
28	3.07	3.08	3.10	3.11	3.12	3.13	3.14	3.15	3.16	3.17
29	3.18	3.19	3.20	3.22	3.23	3.24	3.25	3.26	3.27	3.28
30	3.29	3.30	3.31	3.33	3.34	3.35	3.36	3.37	3.38	3.39
31	3.40	3.41	3.42	3.44	3.45	3.46	3.47	3.48	3.49	3.50
32	3.51	3.52	3.53	3.54	3.56	3.57	3.58	3.59	3.60	3.61
33	3.62	3.63	3.64	3.65	3.67	3.68	3.69	3.70	3.71	3.72
34	3.73	3.74	3.75	3.76	3.78	3.79	3.80	3.81	3.82	3.83
35	3.84	3.85	3.86	3.87	3.89	3.90	3.91	3.92	3.93	3.94
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**

Centigrade Degrees.	BAROMETER : 685mm. (from 682.51 to 687.50). Tenths of Degrees.									
	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.
°	Millim.	Millim.	Millim.	Millim.	Millim.	Millim	Millim.	Millim.	Millim.	Millim.
0	0.00	0.01	0.02	0.03	0.04	0.06	0.07	0.08	0.09	0.10
1	0.11	0.12	0.13	0.14	0.15	0.17	0.18	0.19	0.20	0.21
2	0.22	0.23	0.24	0.25	0.27	0.28	0.29	0.30	0.31	0.32
3	0.33	0.34	0.35	0.36	0.38	0.39	0.40	0.41	0.42	0.43
4	0.44	0.45	0.46	0.48	0.49	0.50	0.51	0.52	0.53	0.54
5	0.55	0.56	0.57	0.59	0.60	0.61	0.62	0.63	0.64	0.65
6	0.66	0.67	0.69	0.70	0.71	0.72	0.73	0.74	0.75	0.76
7	0.77	0.78	0.80	0.81	0.82	0.83	0.84	0.85	0.86	0.87
8	0.88	0.90	0.91	0.92	0.93	0.94	0.95	0.96	0.97	0.98
9	1.00	1.01	1.02	1.03	1.04	1.05	1.06	1.07	1.08	1.09
10	1.11	1.12	1.13	1.14	1.15	1.16	1.17	1.18	1.19	1.21
11	1.22	1.23	1.24	1.25	1.26	1.27	1.28	1.29	1.30	1.32
12	1.33	1.34	1.35	1.36	1.37	1.38	1.39	1.40	1.42	1.43
13	1.44	1.45	1.46	1.47	1.48	1.49	1.50	1.51	1.53	1.54
14	1.55	1.56	1.57	1.58	1.59	1.60	1.61	1.63	1.64	1.65
15	1.66	1.67	1.68	1.69	1.70	1.71	1.72	1.74	1.75	1.76
16	1.77	1.78	1.79	1.80	1.81	1.82	1.84	1.85	1.86	1.87
17	1.88	1.89	1.90	1.91	1.92	1.93	1.95	1.96	1.97	1.98
18	1.99	2.00	2.01	2.02	2.03	2.05	2.06	2.07	2.08	2.09
19	2.10	2.11	2.12	2.13	2.14	2.16	2.17	2.18	2.19	2.20
20	2.21	2.22	2.23	2.24	2.26	2.27	2.28	2.29	2.30	2.31
21	2.32	2.33	2.34	2.35	2.37	2.38	2.39	2.40	2.41	2.42
22	2.43	2.44	2.45	2.47	2.48	2.49	2.50	2.51	2.52	2.53
23	2.54	2.55	2.56	2.58	2.59	2.60	2.61	2.62	2.63	2.64
24	2.65	2.66	2.68	2.69	2.70	2.71	2.72	2.73	2.74	2.75
25	2.76	2.78	2.79	2.80	2.81	2.82	2.83	2.84	2.85	2.86
26	2.87	2.89	2.90	2.91	2.92	2.93	2.94	2.95	2.96	2.97
27	2.99	3.00	3.01	3.02	3.03	3.04	3.05	3.06	3.07	3.08
28	3.10	3.11	3.12	3.13	3.14	3.15	3.16	3.17	3.18	3.20
29	3.21	3.22	3.23	3.24	3.25	3.26	3.27	3.28	3.29	3.31
30	3.32	3.33	3.34	3.35	3.36	3.37	3.38	3.39	3.41	3.42
31	3.43	3.44	3.45	3.46	3.47	3.48	3.49	3.50	3.52	3.53
32	3.54	3.55	3.56	3.57	3.58	3.59	3.60	3.62	3.63	3.64
33	3.65	3.66	3.67	3.68	3.69	3.70	3.71	3.73	3.74	3.75
34	3.76	3.77	3.78	3.79	3.80	3.81	3.83	3.84	3.85	3.86
35	3.87	3.88	3.89	3.90	3.91	3.92	3.94	3.95	3.96	3.97
	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.

Centigrade Degrees.	BAROMETER : 690mm. (from 687.51 to 692 50).									
	Tenths of Degrees.									
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**
o	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.
0	0.00	0.01	0.02	0.03	0.04	0.06	0.07	0.08	0.09	0.10
1	0.11	0.12	0.13	0.14	0.16	0.17	0.18	0.19	0.20	0.21
2	0.22	0.23	0.25	0.26	0.27	0.28	0.29	0.30	0.31	0.32
3	0.33	0.35	0.36	0.37	0.38	0.39	0.40	0.41	0.42	0.43
4	0.45	0.46	0.47	0.48	0.49	0.50	0.51	0.52	0.53	0.55
5	0.56	0.57	0.58	0.59	0.60	0.61	0.62	0.63	0.65	0.66
6	0.67	0.68	0.69	0.70	0.71	0.72	0.74	0.75	0.76	0.77
7	0.78	0.79	0.80	0.81	0.82	0.84	0.85	0.86	0.87	0.88
8	0.89	0.90	0.91	0.92	0.94	0.95	0.96	0.97	0.98	0.99
9	1.00	1.01	1.02	1.04	1.05	1.06	1.07	1.08	1.09	1.10
10	1.11	1.12	1.14	1.15	1.16	1.17	1.18	1.19	1.20	1.21
11	1.23	1.24	1.25	1.26	1.27	1.28	1.29	1.30	1.31	1.33
12	1.34	1.35	1.36	1.37	1.38	1.39	1.40	1.41	1.43	1.44
13	1.45	1.46	1.47	1.48	1.49	1.50	1.51	1.53	1.54	1.55
14	1.56	1.57	1.58	1.59	1.60	1.61	1.63	1.64	1.65	1.66
15	1.67	1.68	1.69	1.70	1.72	1.73	1.74	1.75	1.76	1.77
16	1.78	1.79	1.80	1.82	1.83	1.84	1.85	1.86	1.87	1.88
17	1.89	1.90	1.92	1.93	1.94	1.95	1.96	1.97	1.98	1.99
18	2.00	2.02	2.03	2.04	2.05	2.06	2.07	2.08	2.09	2.10
19	2.12	2.13	2.14	2.15	2.16	2.17	2.18	2.19	2.21	2.22
20	2.23	2.24	2.25	2.26	2.27	2.28	2.29	2.31	2.32	2.33
21	2.34	2.35	2.36	2.37	2.38	2.39	2.41	2.42	2.43	2.44
22	2.45	2.46	2.47	2.48	2.49	2.51	2.52	2.53	2.54	2.55
23	2.56	2.57	2.58	2.59	2.61	2.62	2.63	2.64	2.65	2.66
24	2.67	2.68	2.70	2.71	2.72	2.73	2.74	2.75	2.76	2.77
25	2.78	2.80	2.81	2.82	2.83	2.84	2.85	2.86	2.87	2.88
26	2.90	2.91	2.92	2.93	2.94	2.95	2.96	2.97	2.98	3.00
27	3.01	3.02	3.03	3.04	3.05	3.06	3.07	3.08	3.10	3.11
28	3.12	3.13	3.14	3.15	3.16	3.17	3.19	3.20	3.21	3.22
29	3.23	3.24	3.25	3.26	3.27	3.29	3.30	3.31	3.32	3.33
30	3.34	3.35	3.36	3.37	3.39	3.40	3.41	3.42	3.43	3.44
31	3.45	3.46	3.47	3.49	3.50	3.51	3.52	3.53	3.54	3.55
32	3.56	3.57	3.59	3.60	3.61	3.62	3.63	3.64	3.65	3.66
33	3.68	3.69	3.70	3.71	3.72	3.73	3.74	3.75	3.76	3.78
34	3.79	3.80	3.81	3.82	3.83	3.84	3.85	3.86	3.88	3.89
35	3.90	3.91	3.92	3.93	3.94	3.95	3.96	3.98	3.99	4.00
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**

Centigrade Degrees.	BAROMETER : 695mm. (from 692.51 to 697.50). Tenths of Degrees.									
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**
°	Millim.	Millim.	Millim.	Millim.	Millim	Millim.	Millim.	Millim.	Millim.	Millim.
0	0.00	0.01	0.02	0.03	0.04	0.06	0.07	0.08	0.09	0.10
1	0.11	0.12	0.13	0.15	0.16	0.17	0.18	0.19	0.20	0.21
2	0.22	0.24	0.25	0.26	0.27	0.28	0.29	0.30	0.31	0.33
3	0.34	0.35	0.36	0.37	0.38	0.39	0.40	0.42	0.43	0.44
4	0.45	0.46	0.47	0.48	0.49	0.50	0.52	0.53	0.54	0.55
5	0.56	0.57	0.58	0.59	0.61	0.62	0.63	0.64	0.65	0.66
6	0.67	0.68	0.70	0.71	0.72	0.73	0.74	0.75	0.76	0.77
7	0.79	0.80	0.81	0.82	0.83	0.84	0.85	0.86	0.87	0.89
8	0.90	0.91	0.92	0.93	0.94	0.95	0.96	0.98	0.99	1.00
9	1.01	1.02	1.03	1.04	1.05	1.07	1.08	1.09	1.10	1.11
10	1.12	1.13	1.14	1.16	1.17	1.18	1.19	1.20	1.21	1.22
11	1.23	1.25	1.26	1.27	1.28	1.29	1.30	1.31	1.32	1.33
12	1.35	1.36	1.37	1.38	1.39	1.40	1.41	1.42	1.44	1.45
13	1.46	1.47	1.48	1.49	1.50	1.51	1.52	1.54	1.55	1.56
14	1.57	1.58	1.59	1.60	1.61	1.63	1.64	1.65	1.66	1.67
15	1.68	1.69	1.71	1.72	1.73	1.74	1.75	1.76	1.77	1.78
16	1.79	1.81	1.82	1.83	1.84	1.85	1.86	1.87	1.88	1.90
17	1.91	1.92	1.93	1.94	1.95	1.96	1.97	1.99	2.00	2.01
18	2.02	2.03	2.04	2.05	2.06	2.08	2.09	2.10	2.11	2.12
19	2.13	2.14	2.15	2.16	2.18	2.19	2.20	2.21	2.22	2.23
20	2.24	2.25	2.27	2.28	2.29	2.30	2.31	2.32	2.33	2.34
21	2.36	2.37	2.38	2.39	2.40	2.41	2.42	2.43	2.45	2.46
22	2.47	2.48	2.49	2.50	2.51	2.52	2.53	2.55	2.56	2.57
23	2.58	2.59	2.60	2.61	2.62	2.64	2.65	2.66	2.67	2.68
24	2.69	2.70	2.71	2.73	2.74	2.75	2.76	2.77	2.78	2.79
25	2.80	2.82	2.83	2.84	2.85	2.86	2.87	2.88	2.89	2.91
26	2.92	2.93	2.94	2.95	2.96	2.97	2.98	3.00	3.01	3.02
27	3.03	3.04	3.05	3.06	3.07	3.08	3.10	3.11	3.12	3.13
28	3.14	3.15	3.16	3.17	3.19	3.20	3.21	3.22	3.23	3.24
29	3.25	3.26	3.28	3.29	3.30	3.31	3.32	3.33	3.34	3.35
30	3.37	3.38	3.39	3.40	3.41	3.42	3.43	3.44	3.45	3.47
31	3.48	3.49	3.50	3.51	3.52	3.53	3.54	3.56	3.57	3.58
32	3.59	3.60	3.61	3.62	3.63	3.65	3.66	3.67	3.68	3.69
33	3.70	3.71	3.72	3.74	3.75	3.76	3.77	3.78	3.79	3.80
34	3.81	3.83	3.84	3.85	3.86	3.87	3.88	3.89	3.90	3.91
35	3.93	3.94	3.95	3.96	3.97	3.98	3.99	4.00	4.02	4.03
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**

BAROMETER : 700$^{mm.}$ (from 697.51 to 702.50).

Centigrade Degrees.	Tenths of Degrees.									
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**
°	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.
0	0.00	0.01	0.02	0.03	0.05	0.06	0.07	0.08	0.09	0.10
1	0.11	0.12	0.14	0.15	0.16	0.17	0.18	0.19	0.20	0.21
2	0.23	0.24	0.25	0.26	0.27	0.28	0.29	0.31	0.32	0.33
3	0.34	0.35	0.36	0.37	0.38	0.40	0.41	0.42	0.43	0.44
4	0.45	0.46	0.47	0.49	0.50	0.51	0.52	0.53	0.54	0.55
5	0.56	0.58	0.59	0.60	0.61	0.62	0.63	0.64	0.66	0.67
6	0.68	0.69	0.70	0.71	0.72	0.73	0.75	0.76	0.77	0.78
7	0.79	0.80	0.81	0.82	0.84	0.85	0.86	0.87	0.88	0.89
8	0.90	0.92	0.93	0.94	0.95	0.96	0.97	0.98	0.99	1.01
9	1.02	1.03	1.04	1.05	1.06	1.07	1.08	1.10	1.11	1.12
10	1.13	1.14	1.15	1.16	1.17	1.19	1.20	1.21	1.22	1.23
11	1.24	1.25	1.27	1.28	1.29	1.30	1.31	1.32	1.33	1.34
12	1.36	1.37	1.38	1.39	1.40	1.41	1.42	1.43	1.45	1.46
13	1.47	1.48	1.49	1.50	1.51	1.53	1.54	1.55	1.56	1.57
14	1.58	1.59	1.60	1.62	1.63	1.64	1.65	1.66	1.67	1.68
15	1.69	1.71	1.72	1.73	1.74	1.75	1.76	1.77	1.79	1.80
16	1.81	1.82	1.83	1.84	1.85	1.86	1.88	1.89	1.90	1.91
17	1.92	1.93	1.94	1.95	1.97	1.98	1.99	2.00	2.01	2.02
18	2.03	2.04	2.06	2.07	2.08	2.09	2.10	2.11	2.12	2.14
19	2.15	2.16	2.17	2.18	2.19	2.20	2.21	2.23	2.24	2.25
20	2.26	2.27	2.28	2.29	2.30	2.32	2.33	2.34	2.35	2.36
21	2.37	2.38	2.40	2.41	2.42	2.43	2.44	2.45	2.46	2.47
22	2.49	2.50	2.51	2.52	2.53	2.54	2.55	2.56	2.58	2.59
23	2.60	2.61	2.62	2.63	2.64	2.66	2.67	2.68	2.69	2.70
24	2.71	2.72	2.73	2.75	2.76	2.77	2.78	2.79	2.80	2.81
25	2.82	2.84	2.85	2.86	2.87	2.88	2.89	2.90	2.91	2.93
26	2.94	2.95	2.96	2.97	2.98	2.99	3.01	3.02	3.03	3.04
27	3.05	3.06	3.07	3.08	3.10	3.11	3.12	3.13	3.14	3.15
28	3.16	3.17	3.19	3.20	3.21	3.22	3.23	3.24	3.25	3.27
29	3.28	3.29	3.30	3.31	3.32	3.33	3.34	3.36	3.37	3.38
30	3.39	3.40	3.41	3.42	3.43	3.45	3.46	3.47	3.48	3.49
31	3.50	3.51	3.52	3.54	3.55	3.56	3.57	3.58	3.59	3.60
32	3.62	3.63	3.64	3.65	3.66	3.67	3.68	3.69	3.71	3.72
33	3.73	3.74	3.75	3.76	3.77	3.78	3.80	3.81	3.82	3.83
34	3.84	3.85	3.86	3.88	3.89	3.90	3.91	3.92	3.93	3.94
35	3.95	3.97	3.98	3.99	4.00	4.01	4.02	4.03	4.04	4.06
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**

Centigrade Degrees.	BAROMETER : 705mm. (from 702.51 to 707.50). Tenths of Degrees.									
	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.
	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.
o 0	0.00	0.01	0.02	0.03	0.05	0.06	0.07	0.08	0.09	0.10
1	0.11	0.13	0.14	0.15	0.16	0.17	0.18	0.19	0.20	0.22
2	0.23	0.24	0.25	0.26	0.27	0.28	0.30	0.31	0.32	0 33
3	0.34	0.35	0.36	0.38	0.39	0.40	0.41	0.42	0.43	0.44
4	0.46	0.47	0.48	0.49	0.50	0.51	0.52	0.53	0.55	0.56
5	0.57	0.58	0.59	0.60	0.61	0.63	0.64	0.65	0.66	0.67
6	0.68	0.69	0.71	0.72	0.73	0.74	0.75	0.76	0.77	0.79
7	0.80	0.81	0.82	0.83	0.84	0.85	0.86	0.88	0.89	0.90
8	0.91	0.92	0.93	0.94	0.96	0.97	0.98	0.99	1.00	1.01
9	1.02	1.04	1.05	1.06	1.07	1.08	1 09	1.10	1.12	1.13
10	1.14	1.15	1.16	1.17	1.18	1.19	1.21	1.22	1.23	1.24
11	1.25	1.26	1.27	1.29	1.30	1.31	1.32	1.33	1.34	1.35
12	1.37	1.38	1.39	1.40	1.41	1.42	1.43	1.45	1.46	1.47
13	1.48	1.49	1.50	1.51	1.52	1.54	1.55	1.56	1.57	1.58
14	1.59	1.60	1.62	1.63	1.64	1.65	1.66	1.67	1.68	1.70
15	1.71	1.72	1.73	1.74	1.75	1.76	1.78	1.79	1.80	1.81
16	1.82	1.83	1.84	1.85	1.87	1.88	1.89	1.90	1.91	1.92
17	1.93	1.95	1.96	1.97	1.98	1.99	2.00	2.01	2.03	2.04
18	2.05	2.06	2.07	2.08	2.09	2.11	2.12	2.13	2.14	2.15
19	2.16	2.17	2.18	2.20	2.21	2.22	2.23	2.24	2.25	2.26
20	2.28	2.29	2.30	2.31	2.32	2.33	2.34	2.36	2.37	2.38
21	2.39	2.40	2.41	2.42	2.44	2.45	2.46	2.47	2.48	2.49
22	2.50	2.51	2.53	2.54	2.55	2.56	2.57	2.58	2.59	2.61
23	2.62	2.63	2.64	2.65	2.66	2.67	2.69	2.70	2.71	2.72
24	2.73	2.74	2.75	2.77	2.78	2.79	2.80	2.81	2.82	2.83
25	2.84	2.86	2.87	2.88	2.89	2.90	2.91	2.92	2.94	2.95
26	2.96	2.97	2.98	2.99	3.00	3.02	3.03	3.04	3.05	3.06
27	3.07	3.08	3.10	3.11	3.12	3.13	3.14	3.15	3.16	3.17
28	3.19	3.20	3.21	3.22	3.23	3.24	3.25	3.27	3.28	3.29
29	3.30	3.31	3.32	3.33	3.35	3.36	3.37	3.38	3.39	3.40
30	3.41	3.42	3.44	3.45	3.46	3.47	3.48	3.49	3.50	3.52
31	3.53	3.54	3.55	3.56	3.57	3.58	3.60	3.61	3.62	3.63
32	3.64	3.65	3.66	3.68	3.69	3.70	3.71	3.72	3.73	3.74
33	3.75	3.77	3.78	3.79	3.80	3.81	3.82	3.83	3.85	3.86
34	3.87	3.88	3.89	3.90	3.91	3.93	3.94	3.95	3.96	3.97
35	3.98	3.99	4.01	4.02	4.03	4.04	4.05	4.06	4.07	4.08
	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.

BAROMETER: 710mm. (from 707.51 to 712.50).

Centigrade Degrees.	Tenths of Degrees.									
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**
°	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim	Millim.	Millim.	Millim.
0	0.00	0.01	0.02	0.03	0.05	0.06	0.07	0.08	0.09	0.10
1	0.11	0.13	0.14	0.15	0.16	0.17	0.18	0.19	0.21	0.22
2	0.23	0.24	0.25	0.26	0.28	0.29	0.30	0.31	0.32	0.33
3	0.34	0.36	0.37	0.38	0.39	0.40	0.41	0.42	0.44	0.45
4	0.46	0.47	0.48	0.49	0.50	0.52	0.53	0.54	0.55	0.56
5	0.57	0.58	0.60	0.61	0.62	0.63	0.64	0.65	0.66	0.68
6	0.69	0.70	0.71	0.72	0.73	0.74	0.76	0.77	0.78	0.79
7	0.80	0.81	0.83	0.84	0.85	0.86	0.87	0.88	0.89	0.91
8	0.92	0.93	0.94	0.95	0.96	0.97	0.99	1.00	1.01	1.02
9	1.03	1.04	1.05	1.07	1.08	1.09	1.10	1.11	1.12	1.13
10	1.15	1.16	1.17	1.18	1.19	1.20	1.21	1.23	1.24	1.25
11	1.26	1.27	1.28	1.29	1.31	1.32	1.33	1.34	1.35	1.36
12	1.38	1.39	1.40	1.41	1.42	1.43	1.44	1.46	1.47	1.48
13	1.49	1.50	1.51	1.52	1.54	1.55	1.56	1.57	1.58	1.59
14	1.60	1.62	1.63	1.64	1.65	1.66	1.67	1.68	1.70	1.71
15	1.72	1.73	1.74	1.75	1.76	1.78	1.79	1.80	1.81	1.82
16	1.83	1.84	1.86	1.87	1.88	1.89	1.90	1.91	1.93	1.94
17	1.95	1.96	1.97	1.98	1.99	2.01	2.02	2.03	2.04	2.05
18	2.06	2.07	2.09	2.10	2.11	2.12	2.13	2.14	2.15	2.17
19	2.18	2.19	2.20	2.21	2.22	2.23	2.25	2.26	2.27	2.28
20	2.29	2.30	2.31	2.33	2.34	2.35	2.36	2.37	2.38	2.40
21	2.41	2.42	2.43	2.44	2.45	2.46	2.48	2.49	2.50	2.51
22	2.52	2.53	2.54	2.56	2.57	2.58	2.59	2.60	2.61	2.62
23	2.64	2.65	2.66	2.67	2.68	2.69	2.70	2.72	2.73	2.74
24	2.75	2.76	2.77	2.78	2.80	2.81	2.82	2.83	2.84	2.85
25	2.86	2.88	2.89	2.90	2.91	2.92	2.93	2.95	2.96	2.97
26	2.98	2.99	3.00	3.01	3.03	3.04	3.05	3.06	3.07	3.08
27	3.09	3.11	3.12	3.13	3.14	3.15	3.16	3.17	3.19	3.20
28	3.21	3.22	3.23	3.24	3.25	3.27	3.28	3.29	3.30	3.31
29	3.32	3.33	3.35	3.36	3.37	3.38	3.39	3.40	3.41	3.43
30	3.44	3.45	3.46	3.47	3.48	3.50	3.51	3.52	3.53	3.54
31	3.55	3.56	3.58	3.59	3.60	3.61	3.62	3.63	3.64	3.66
32	3.67	3.68	3.69	3.70	3.71	3.72	3.74	3.75	3.76	3.77
33	3.78	3.79	3.80	3.82	3.83	3.84	3.85	3.86	3.87	3.88
34	3.90	3.91	3.92	3.93	3.94	3.95	3.96	3.98	3.99	4.00
35	4.01	4.02	4.03	4.05	4.06	4.07	4.08	4.09	4.10	4.11
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**

Centigrade Degrees.	BAROMETER : 715mm. (from 712.51 to 717.50). Tenths of Degrees.									
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**
○	Millim.	Millim.	Millim.	Millim.	Millim	Millim.	Millim.	Millim.	Millim.	Millim.
0	0.00	0.01	0.02	0.04	0.05	0.06	0.07	0.08	0.09	0.10
1	0.12	0.13	0.14	0.15	0.16	0.17	0.18	0.20	0.21	0.22
2	0.23	0.24	0.25	0.27	0.28	0.29	0.30	0.31	0.32	0.33
3	0.35	0.36	0.37	0.38	0.39	0.40	0.42	0.43	0.44	0.45
4	0.46	0.47	0.48	0.50	0.51	0.52	0.53	0.54	0.55	0.57
5	0.58	0.59	0.60	0.61	0.62	0.63	0.65	0.66	0.67	0.68
6	0.69	0.70	0.72	0.73	0.74	0.75	0.76	0.77	0.78	0.80
7	0.81	0.82	0.83	0.84	0.85	0.87	0.88	0.89	0.90	0.91
8	0.92	0.93	0.95	0.96	0.97	0.98	0.99	1.00	1.02	1.03
9	1.04	1.05	1.06	1.07	1.08	1.10	1.11	1.12	1.13	1.14
10	1.15	1.17	1.18	1.19	1.20	1.21	1.22	1.23	1.25	1.26
11	1.27	1.28	1.29	1.30	1.32	1.33	1.34	1.35	1.36	1.37
12	1.38	1.40	1.41	1.42	1.43	1.44	1.45	1.47	1.48	1.49
13	1.50	1.51	1.52	1.53	1.55	1.56	1.57	1.58	1.59	1.60
14	1.62	1.63	1.64	1.65	1.66	1.67	1.68	1.70	1.71	1.72
15	1.73	1.74	1.75	1.77	1.78	1.79	1.80	1.81	1.82	1.83
16	1.85	1.86	1.87	1.88	1.89	1.90	1.92	1.93	1.94	1.95
17	1.96	1.97	1.98	2.00	2.01	2.02	2.03	2.04	2.05	2.07
18	2.08	2.09	2.10	2.11	2.12	2.13	2.15	2.16	2.17	2.18
19	2.19	2.20	2.22	2.23	2.24	2.25	2.26	2.27	2.28	2.30
20	2.31	2.32	2.33	2.34	2.35	2.37	2.38	2.39	2.40	2.41
21	2.42	2.43	2.45	2.46	2.47	2.48	2.49	2.50	2.52	2.53
22	2.54	2.55	2.56	2.57	2.58	2.60	2.61	2.62	2.63	2.64
23	2.65	2.67	2.68	2.69	2.70	2.71	2.72	2.74	2.75	2.76
24	2.77	2.78	2.79	2.80	2.82	2.83	2.84	2.85	2.86	2.87
25	2.89	2.90	2.91	2.92	2.93	2.94	2.95	2.97	2.98	2.99
26	3.00	3.01	3.02	3.04	3.05	3.06	3.07	3.08	3.09	3.10
27	3.12	3.13	3.14	3.15	3.16	3.17	3.19	3.20	3.21	3.22
28	3.23	3.24	3.25	3 27	3.28	3.29	3.30	3.31	3.32	3.34
29	3.35	3.36	3.37	3.38	3.39	3.40	3.42	3.43	3.44	3.45
30	3.46	3.47	3.49	3.50	3.51	3.52	3.53	3.54	3.55	3.57
31	3.58	3.59	3.60	3.61	3.62	3.64	3.65	3.66	3.67	3.68
32	3.69	3.70	3.72	3.73	3.74	3.75	3.76	3.77	3.79	3.80
33	3.81	3.82	3.83	3.84	3.85	3.87	3.88	3.89	3.90	3.91
34	3.92	3.94	3.95	3.96	3.97	3.98	3.99	4.00	4.02	4.03
35	4.04	4.05	4.06	4.07	4.09	4.10	4.11	4.12	4.13	4.14
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**

Centigrade Degrees.	BAROMETER: 720mm. (from 717.51 to 722.50). Tenths of Degrees.									
	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.
°	Millim.	Millim.	Millim.	Millim.	Millim.	Millim	Millim.	Millim.	Millim.	Millim.
0	0.00	0.01	0.02	0.03	0.05	0.06	0.07	0.08	0.09	0.10
1	0.12	0.13	0.14	0.15	0.16	0.17	0.19	0.20	0.21	0.22
2	0.23	0.24	0.26	0.27	0.28	0.29	0.30	0.31	0.33	0.34
3	0.35	0.36	0.37	0.38	0.40	0.41	0.42	0.43	0.44	0.45
4	0.46	0.48	0.49	0.50	0.51	0.52	0.53	0.55	0.56	0.57
5	0.58	0.59	0.60	0.62	0.63	0.64	0.65	0.66	0.67	0.69
6	0.70	0.71	0.72	0.73	0.74	0.76	0.77	0.78	0.79	0.80
7	0.81	0.83	0.84	0.85	0.86	0.87	0.88	0.89	0.91	0.92
8	0.93	0.94	0.95	0.96	0.98	0.99	1.00	1.01	1.02	1.03
9	1.05	1.06	1.07	1.08	1.09	1.10	1.12	1.13	1.14	1.15
10	1.16	1.17	1.19	1.20	1.21	1.22	1.23	1.24	1.26	1.27
11	1.28	1.29	1.30	1.31	1.32	1.34	1.35	1.36	1.37	1.38
12	1.39	1.41	1.42	1.43	1.44	1.45	1.46	1.48	1.49	1.50
13	1.51	1.52	1.53	1.55	1.56	1.57	1.58	1.59	1.60	1.62
14	1.63	1.64	1.65	1.66	1.67	1.69	1.70	1.71	1.72	1.73
15	1.74	1.75	1.77	1.78	1.79	1.80	1.81	1.82	1.84	1.85
16	1.86	1.87	1.88	1.89	1.91	1.92	1.93	1.94	1.95	1.96
17	1.98	1.99	2.00	2.01	2.02	2.03	2.05	2.06	2.07	2.08
18	2.09	2.10	2.11	2.13	2.14	2.15	2.16	2.17	2.18	2.20
19	2.21	2.22	2.23	2.24	2.25	2.27	2.28	2.29	2.30	2.31
20	2.32	2.34	2.35	2.36	2.37	2.38	2.39	2.41	2.42	2.43
21	2.44	2.45	2.46	2.48	2.49	2.50	2.51	2.52	2.53	2.54
22	2.56	2.57	2.58	2.59	2.60	2.61	2.63	2.64	2.65	2.66
23	2.67	2.68	2.70	2.71	2.72	2.73	2.74	2.75	2.77	2.78
24	2.79	2.80	2.81	2.82	2.84	2.85	2.86	2.87	2.88	2.89
25	2.91	2.92	2.93	2.94	2.95	2.96	2.97	2.99	3.00	3.01
26	3.02	3.03	3.04	3.06	3.07	3.08	3.09	3.10	3.11	3.13
27	3.14	3.15	3.16	3.17	3.18	3.20	3.21	3.22	3.23	3.24
28	3.25	3.27	3.28	3.29	3.30	3.31	3.32	3.34	3.35	3.36
29	3.37	3.38	3.39	3.40	3.42	3.43	3.44	3.45	3.46	3.47
30	3.49	3.50	3.51	3.52	3.53	3.54	3.56	3.57	3.58	3.59
31	3.60	3.61	3.63	3.64	3.65	3.66	3.67	3.68	3.70	3.71
32	3.72	3.73	3.74	3.75	3.77	3.78	3.79	3.80	3.81	3.82
33	3.83	3.85	3.86	3.87	3.88	3.89	3.90	3.92	3.93	3.94
34	3.95	3.96	3.97	3.99	4.00	4.01	4.02	4.03	4.04	4.06
35	4.07	4.08	4.09	4.10	4.11	4.13	4.14	4.15	4.16	4.17
	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.

BAROMETER : 725mm. (from 722.51 to 727.50).

Centigrade Degrees.	Tenths of Degrees.									
	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.
o	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.
0	0.00	0.01	0.02	0.04	0.05	0.06	0.07	0.08	0.09	0.11
1	0.12	0.13	0.14	0.15	0.16	0.18	0.19	0.20	0.21	0.22
2	0.23	0.25	0.26	0.27	0.28	0.29	0.30	0.32	0.33	0.34
3	0.35	0.36	0.37	0.39	0.40	0.41	0.42	0.43	0.44	0.46
4	0.47	0.48	0.49	0.50	0.51	0.53	0.54	0.55	0.56	0.57
5	0.59	0.60	0.61	0.62	0.63	0.64	0.66	0.67	0.68	0.69
6	0.70	0.71	0.73	0.74	0.75	0.76	0.77	0.78	0.80	0.81
7	0.82	0.83	0.84	0.85	0.87	0.88	0.89	0.90	0.91	0.92
8	0.94	0.95	0.96	0.97	0.98	0.99	1.01	1.02	1.03	1.04
9	1.05	1.06	1.08	1.09	1.10	1.11	1.12	1.14	1.15	1.16
10	1.17	1.18	1.19	1.21	1.22	1.23	1.24	1.25	1.26	1.28
11	1.29	1.30	1.31	1.32	1.33	1.35	1.36	1.37	1.38	1.39
12	1.40	1.42	1.43	1.44	1.45	1.46	1.47	1.49	1.50	1.51
13	1.52	1.53	1.54	1.56	1.57	1.58	1.59	1.60	1.61	1.63
14	1.64	1.65	1.66	1.67	1.69	1.70	1.71	1.72	1.73	1.74
15	1.76	1.77	1.78	1.79	1.80	1.81	1.83	1.84	1.85	1.86
16	1.87	1.88	1.90	1.91	1.92	1.93	1.94	1.95	1.97	1.98
17	1.99	2.00	2.01	2.02	2.04	2.05	2.06	2.07	2.08	2.09
18	2.11	2.12	2.13	2.14	2.15	2.16	2.18	2.19	2.20	2.21
19	2.22	2.23	2.25	2.26	2.27	2.28	2.29	2.31	2.32	2.33
20	2.34	2.35	2.36	2.38	2.39	2.40	2.41	2.42	2.43	2.45
21	2.46	2.47	2.48	2.49	2.50	2.52	2.53	2.54	2.55	2.56
22	2.57	2.59	2.60	2.61	2.62	2.63	2.64	2.66	2.67	2.68
23	2.69	2.70	2.71	2.73	2.74	2.75	2.76	2.77	2.78	2.80
24	2.81	2.82	2.83	2.84	2.86	2.87	2.88	2.89	2.90	2.91
25	2.93	2.94	2.95	2.96	2.97	2.98	3.00	3.01	3.02	3.03
26	3.04	3.05	3.07	3.08	3.09	3.10	3.11	3.12	3.14	3.15
27	3.16	3.17	3.18	3.19	3.21	3.22	3.23	3.24	3.25	3.26
28	3.28	3.29	3.30	3.31	3.32	3.33	3.35	3.36	3.37	3.38
29	3.39	3.41	3.42	3.43	3.44	3.45	3.46	3.48	3.49	3.50
30	3.51	3.52	3.53	3.55	3.56	3.57	3.58	3.59	3.60	3.62
31	3.63	3.64	3.65	3.66	3.67	3.69	3.70	3.71	3.72	3.73
32	3.74	3.76	3.77	3.78	3.79	3.80	3.81	3.83	3.84	3.85
33	3.86	3.87	3.88	3.90	3.91	3.92	3.93	3.94	3.96	3.97
34	3.98	3.99	4.00	4.01	4.03	4.04	4.05	4.06	4.07	4.08
35	4.10	4.11	4.12	4.13	4.14	4.15	4.17	4.18	4.19	4.20
	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.

BAROMETER: 730mm. (from 727.51 to 732.50).

Centigrade Degrees.	Tenths of Degrees.									
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**
°	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.
0	0.00	0.01	0.02	0.04	0.05	0.06	0.07	0.08	0.09	0.11
1	0.12	0.13	0.14	0.15	0.16	0.18	0.19	0.20	0.21	0.22
2	0.24	0.25	0.26	0.27	0.28	0.29	0.31	0.32	0.33	0.34
3	0.35	0.37	0.38	0.39	0.40	0.41	0.42	0.44	0.45	0.46
4	0.47	0.48	0.49	0.51	0.52	0.53	0.54	0.55	0.57	0.58
5	0.59	0.60	0.61	0.62	0.64	0.65	0.66	0.67	0.68	0.70
6	0.71	0.72	0.73	0.74	0.75	0.77	0.78	0.79	0.80	0.81
7	0.82	0.84	0.85	0.86	0.87	0.88	0.90	0.91	0.92	0.93
8	0.94	0.95	0.97	0.98	0.99	1.00	1.01	1.03	1.04	1.05
9	1.06	1.07	1.08	1.10	1.11	1.12	1.13	1.14	1.15	1.17
10	1.18	1.19	1.20	1.21	1.23	1.24	1.25	1.26	1.27	1.28
11	1.30	1.31	1.32	1.33	1.34	1.35	1.37	1.38	1.39	1.40
12	1.41	1.43	1.44	1.45	1.46	1.47	1.48	1.50	1.51	1.52
13	1.53	1.54	1.56	1.57	1.58	1.59	1.60	1.61	1.63	1.64
14	1.65	1.66	1.67	1.68	1.70	1.71	1.72	1.73	1.74	1.76
15	1.77	1.78	1.79	1.80	1.81	1.83	1.84	1.85	1.86	1.87
16	1.89	1.90	1.91	1.92	1.93	1.94	1.96	1.97	1.98	1.99
17	2.00	2.01	2.03	2.04	2.05	2.06	2.07	2.09	2.10	2.11
18	2.12	2.13	2.14	2.16	2.17	2.18	2.19	2.20	2.22	2.23
19	2.24	2.25	2.26	2.27	2.29	2.30	2.31	2.32	2.33	2.34
20	2.36	2.37	2.38	2.39	2.40	2.42	2.43	2.44	2.45	2.46
21	2.47	2.49	2.50	2.51	2.52	2.53	2.54	2.56	2.57	2.58
22	2.59	2.60	2.62	2.63	2.64	2.65	2.66	2.67	2.69	2.70
23	2.71	2.72	2.73	2.75	2.76	2.77	2.78	2.79	2.80	2.82
24	2.83	2.84	2.85	2.86	2.87	2.89	2.90	2.91	2.92	2.93
25	2.95	2.96	2.97	2.98	2.99	3.01	3.02	3.03	3.04	3.05
26	3.06	3.08	3.09	3.10	3.11	3.12	3.13	3.15	3.16	3.17
27	3.18	3.19	3.20	3.22	3.23	3.24	3.25	3.26	3.28	3.29
28	3.30	3.31	3.32	3.33	3.35	3.36	3.37	3.38	3.39	3.41
29	3.42	3.43	3.44	3.45	3.46	3.48	3.49	3.50	3.51	3.52
30	3.53	3.55	3.56	3.57	3.58	3.59	3.61	3.62	3.63	3.64
31	3.65	3.66	3.68	3.69	3.70	3.71	3 72	3.73	3.75	3.76
32	3.77	3.78	3.79	3.81	3.82	3.83	3.84	3.85	3.86	3.88
33	3.89	3.90	3.91	3.92	3.94	3.95	3.96	3.97	3.98	3.99
34	4.01	4.02	4.03	4.04	4.05	4.06	4.07	4.09	4.10	4.11
35	4.12	4.14	4.15	4.16	4.17	4.18	4.19	4.21	4.22	4.23
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**

BAROMETER : 735mm. (from 732.51 to 787.50).

Centigrade Degrees.	Tenths of Degrees.									
	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.
	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.
0	0.00	0.01	0.02	0.04	0.05	0.06	0.07	0.08	0.09	0.11
1	0.12	0.13	0.14	0.15	0.17	0.18	0.19	0.20	0.21	0.23
2	0.24	0.25	0.26	0.27	0.28	0.30	0.31	0.32	0.33	0 34
3	0.36	0.37	0.38	0.39	0.40	0.42	0.43	0.44	0.45	0.46
4	0.47	0.49	0.50	0.51	0.52	0.53	0.55	0.56	0.57	0.58
5	0.59	0.61	0.62	0.63	0.64	0.65	0.66	0.68	0.69	0.70
6	0.71	0.72	0.74	0.75	0.76	0.77	0.78	0.79	0.81	0.82
7	0.83	0.84	0.85	0.87	0.88	0.89	0.90	0.91	0.93	0.94
8	0 95	0.96	0.97	0.98	1.00	1.01	1.02	1.03	1.04	1.06
9	1.07	1.08	1.09	1.10	1,12	1.13	1.14	1.15	1.16	1.17
10	1.19	1.20	1.21	1.22	1.23	1.25	1.26	1.27	1.28	1.29
11	1.30	1.32	1.33	1.34	1.35	1.36	1.37	1.39	1.40	1.41
12	1.42	1.44	1.45	1.46	1.47	1.48	1.49	1.51	1.52	1.53
13	1.54	1.55	1.57	1.58	1.59	1.60	1.61	1.63	1.64	1.65
14	1.66	1.67	1.69	1.70	1.71	1.72	1.73	1.74	1.76	1.77
15	1.78	1.79	1.80	1.82	1.83	1.84	1.85	1.86	1.87	1.89
16	1.90	1.91	1.92	1.93	1.95	1.96	1.97	1.98	1.99	2.00
17	2.02	2.03	2.04	2.05	2.06	2.08	2.09	2.10	2.11	2.12
18	2.14	2.15	2.16	2.17	2.18	2.19	2.21	2.22	2.23	2.24
19	2.25	2.27	2.28	2.29	2.30	2.31	2.33	2.34	2.35	2.36
20	2.37	2.38	2.40	2.41	2.42	2.43	2.44	2.46	2.47	2.48
21	2.49	2.50	2.51	2.53	2.54	2.55	2.56	2.57	2.59	2.60
22	2.61	2.62	2.63	2.65	2.66	2.67	2.68	2.69	2.70	2.72
23	2.73	2.74	2.75	2.76	2.78	2.79	2.80	2.81	2.82	2 84
24	2.85	2.86	2 87	2.88	2.89	2.91	2.92	2.93	2.94	2.95
25	2.97	2.98	2.99	3.00	3.01	3.03	3.04	3.05	3.06	3.07
26	3.08	3.10	3.11	3.12	3.13	3.14	3.16	3.17	3.18	3.19
27	3.20	3.21	3.23	3.24	3.25	3.26	3.27	3.29	3.30	3.31
28	3.32	3.33	3.35	3.36	3.37	3.38	3.39	3.40	3.42	3.43
29	3.44	3.45	3.46	3.48	3.49	3.50	3.51	3.52	3.54	3.55
30	3.56	3.57	3.58	3.59	3.61	3.62	3.63	3.64	3.65	3.67
31	3.68	3.69	3.70	3.71	3.72	3.74	3.75	3.76	3.77	3.78
32	3.80	3.81	3.82	3.83	3.84	3.86	3.87	3.88	3.89	3.90
33	3.91	3.93	3.94	3.95	3.96	3.97	3.99	4.00	4.01	4.02
34	4.03	3.05	4.06	4.07	4.08	4.09	4.10	4.12	4.13	4.14
35	4.15	4.16	4.18	4.19	4.20	4.21	4.22	4.24	4.25	4.26
	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.

Centigrade Degrees.	BAROMETER: 740mm. (from 737.51 to 742.50). Tenths of Degrees.									
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**
°	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.
0	0.00	0.01	0.02	0.04	0.05	0.06	0.07	0.08	0.09	0.11
1	0.12	0.13	0.14	0.16	0.17	0.18	0.19	0.20	0.21	0.23
2	0.24	0.25	0.26	0.27	0.29	0.30	0.31	0.32	0.33	0.35
3	0.36	0.37	0.38	0.39	0.41	0.42	0.43	0.44	0.45	0.47
4	0.48	0.49	0.50	0.51	0.53	0.54	0.55	0.56	0.57	0.59
5	0.60	0.61	0.62	0.63	0.64	0.66	0.67	0.68	0.69	0.70
6	0.72	0.73	0.74	0.75	0.76	0.78	0.79	0.80	0.81	0.82
7	0.84	0.85	0.86	0.87	0.88	0.90	0.91	0.92	0.93	0.94
8	0.96	0.97	0.98	0.99	1.00	1.02	1.03	1.04	1.05	1.06
9	1.07	1.09	1.10	1.11	1.12	1.13	1.15	1.16	1.17	1.18
10	1.19	1.21	1.22	1.23	1.24	1.25	1.27	1.28	1.29	1.30
11	1.31	1.33	1.34	1.35	1.36	1.37	1.39	1.40	1.41	1.42
12	1.43	1.45	1.46	1.47	1.48	1.49	1.50	1.52	1.53	1.54
13	1.55	1.56	1.58	1.59	1.60	1.61	1.62	1.64	1.65	1.66
14	1.67	1.68	1.70	1.71	1.72	1.73	1.74	1.76	1.77	1.78
15	1.79	1.80	1.82	1.83	1.84	1.85	1.86	1.88	1.89	1.90
16	1.91	1.92	1.93	1.95	1.96	1.97	1.98	1.99	2.01	2.02
17	2.03	2.04	2.05	2.07	2.08	2.09	2.10	2.11	2.13	2.14
18	2.15	2.16	2.17	2.19	2.20	2.21	2.22	2.23	2.25	2.26
19	2.27	2.28	2.29	2.31	2.32	2.33	2.34	2.35	2.36	2.38
20	2.39	2.40	2.41	2.42	2.44	2.45	2.46	2.47	2.48	2.50
21	2.51	2.52	2.53	2.54	2.56	2.57	2.58	2.59	2.60	2.62
22	2.63	2.64	2.65	2.66	2.68	2.69	2.70	2.71	2.72	2.74
23	2.75	2.76	2.77	2.78	2.79	2.81	2.82	2.83	2.84	2.85
24	2.87	2.88	2.89	2.90	2.91	2.93	2.94	2.95	2.96	2.97
25	2.99	3.00	3.01	3.02	3.03	3.05	3.06	3.07	3.08	3.09
26	3.11	3.12	3.13	3.14	3.15	3.17	3.18	3.19	3.20	3.21
27	3.22	3.24	3.25	3.26	3.27	3.28	3.30	3.31	3.32	3.33
28	3.34	3 36	3.37	3.38	3.39	3.40	3.42	3.43	3.44	3.45
29	3.46	3.48	3.49	3.50	3.51	3.52	3.54	3.55	3.56	3.57
30	3.58	3.60	3.61	3.62	3.63	3.64	3.65	3.67	3.68	3.69
31	3.70	3.71	3.73	3.74	3.75	3.76	3.77	3.79	3.80	3.81
32	3.82	3.83	3.85	3.86	3.87	3.88	3.89	3.91	3.92	3.93
33	3.94	3.95	3.97	3.98	3.99	4.00	4.01	4.02	4.04	4.05
34	4.06	4.07	4.08	4.10	4.11	4.12	4.13	4.14	4.16	4.17
35	4.18	4.19	4.20	4.22	4.23	4.24	4.25	4.26	4.28	4.29
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**

BAROMETER : 745mm. (from 742.51 to 747.50).

Centigrade Degrees.	Tenths of Degrees.									
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**
°	Millim.	Millim.	Millim.	Millim.	Millim	Millim.	Millim.	Millim.	Millim.	Millim.
0	0.00	0.01	0.02	0.04	0.05	0.06	0.07	0.08	0.10	0.11
1	0.12	0.13	0.14	0.16	0.17	0.18	0.19	0.20	0.22	0.23
2	0.24	0.25	0.26	0.28	0.29	0.30	0.31	0.32	0.34	0.35
3	0.36	0.37	0.38	0.40	0.41	0.42	0.43	0.44	0.46	0.47
4	0.48	0.49	0.51	0.52	0.53	0.54	0.55	0.57	0.58	0.59
5	0.60	0.61	0.63	0.64	0.65	0.66	0.67	0.69	0.70	0.71
6	0.72	0.73	0.75	0.76	0.77	0.78	0.79	0.81	0.82	0.83
7	0.84	0.85	0.87	0.88	0.89	0.90	0.91	0.93	0.94	0.95
8	0.96	0.97	0.99	1.00	1.01	1.02	1.03	1.05	1.06	1.07
9	1.08	1.09	1.11	1.12	1.13	1.14	1.15	1.17	1.18	1.19
10	1.20	1.21	1.23	1.24	1.25	1.26	1.27	1.29	1.30	1.31
11	1.32	1.33	1.35	1.36	1.37	1.38	1.39	1.41	1.42	1.43
12	1.44	1.45	1.47	1.48	1.49	1.50	1.52	1.53	1.54	1.55
13	1.56	1.58	1.59	1.60	1.61	1.62	1.64	1.65	1.66	1.67
14	1.68	1.70	1.71	1.72	1.73	1.74	1.76	1.77	1.78	1.79
15	1.80	1.82	1.83	1.84	1.85	1.86	1.88	1.89	1.90	1.91
16	1.92	1.94	1.95	1.96	1.97	1.98	2.00	2.01	2.02	2.03
17	2.04	2.06	2.07	2.08	2.09	2.10	2.12	2.13	2.14	2.15
18	2.16	2.18	2.19	2.20	2.21	2.22	2.24	2.25	2.26	2.27
19	2.28	2.30	2.31	2.32	2.33	2.34	2.36	2.37	2.38	2.39
20	2.40	2.42	2.43	2.44	2.45	2.46	2.48	2.49	2.50	2.51
21	2.53	2.54	2.55	2.56	2.57	2.59	2.60	2.61	2.62	2.63
22	2.65	2.66	2.67	2.68	2.69	2.71	2.72	2.73	2.74	2.75
23	2.77	2.78	2.79	2.80	2.81	2.83	2.84	2.85	2.86	2.87
24	2.89	2.90	2.91	2.92	2.93	2.95	2.96	2.97	2.98	2.99
25	3.01	3.02	3.03	3.04	3.05	3.07	3.08	3.09	3.10	3.11
26	3.13	3.14	3.15	3.16	3.17	3.19	3.20	3.21	3.22	3.23
27	3.25	3.26	3.27	3.28	3.29	3.31	3.32	3.33	3.34	3.35
28	3.37	3.38	3.39	3.40	3.41	3.43	3.44	3.45	3.46	3.48
29	3.49	3.50	3.51	3.52	3.54	3.55	3.56	3.57	3.58	3.60
30	3.61	3.62	3.63	3.64	3.66	3.67	3.68	3.69	3.70	3.72
31	3.73	3.74	3.75	3.76	3.78	3.79	3.80	3.81	3.82	3.84
32	3.85	3.86	3.87	3.88	3.90	3.91	3.92	3.93	3.94	3.96
33	3.97	3.98	3.99	4.00	4.02	4.03	4.04	4.05	4.06	4.08
34	4.09	4.10	4.11	4.12	4.14	4.15	4.16	4.17	4.18	4.20
35	4.21	4.22	4.23	4.24	4.26	4.27	4.28	4.29	4.30	4.32
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**

Centigrade Degrees.	BAROMETER: 750mm. (from 747.51 to 752.50). Tenths of Degrees.									
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**
°	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.
0	0.00	0.01	0.02	0.04	0.05	0.06	0.07	0.08	0.10	0.11
1	0.12	0.13	0.15	0.16	0.17	0.18	0.19	0.21	0.22	0.23
2	0.24	0.25	0.27	0.28	0.29	0.30	0.31	0.33	0.34	0.35
3	0.36	0.38	0.39	0.40	0.41	0.42	0.44	0.45	0.46	0.47
4	0.48	0.50	0.51	0.52	0.53	0.55	0.56	0.57	0.58	0.59
5	0.61	0.62	0.63	0.64	0.65	0.67	0.68	0.69	0.70	0.71
6	0.73	0.74	0.75	0.76	0.77	0.79	0.80	0.81	0.82	0.84
7	0.85	0.86	0.87	0.88	0.90	0.91	0.92	0.93	0.94	0.96
8	0.97	0.98	0.99	1.00	1.02	1.03	1.04	1.05	1.07	1.08
9	1.09	1.10	1.11	1.13	1.14	1.15	1.16	1.17	1.19	1.20
10	1.21	1.22	1.23	1.25	1.26	1.27	1.28	1.30	1.31	1.32
11	1.33	1.34	1.36	1.37	1.38	1.39	1.40	1.42	1.43	1.44
12	1.45	1.46	1.48	1.49	1.50	1.51	1.53	1.54	1.55	1.56
13	1.57	1.59	1.60	1.61	1.62	1.63	1.65	1.66	1.67	1.68
14	1.69	1.71	1.72	1.73	1.74	1.76	1.77	1.78	1.79	1.80
15	1.82	1.83	1.84	1.85	1.86	1.88	1.89	1.90	1.91	1.92
16	1.94	1.95	1.96	1.97	1.99	2.00	2.01	2.02	2.03	2.05
17	2.06	2.07	2.08	2.09	2.11	2.12	2.13	2.14	2.15	2.17
18	2.18	2.19	2.20	2.21	2.23	2.24	2.25	2.26	2.28	2.29
19	2.30	2.31	2.32	2.34	2.35	2.36	2.37	2.38	2.40	2.41
20	2.42	2.43	2.45	2.46	2.47	2.48	2.49	2.51	2.52	2.53
21	2.54	2.55	2.57	2.58	2.59	2.60	2.61	2.63	2.64	2.65
22	2.66	2.68	2.69	2.70	2.71	2.72	2.73	2.75	2.76	2.77
23	2.78	2.80	2.81	2.82	2.83	2.84	2.86	2.87	2.88	2.89
24	2.91	2.92	2.93	2.94	2.95	2.97	2.98	2.99	3.00	3.01
25	3.03	3.04	3.05	3.06	3.07	3.09	3.10	3.11	3.12	3.14
26	3.15	3.16	3.17	3.18	3.20	3.21	3.22	3.23	3.24	3.26
27	3.27	3.28	3.29	3.30	3.32	3.33	3.34	3.35	3.37	3.38
28	3.39	3.40	3.41	3.43	3.44	3.45	3.46	3.47	3.49	3.50
29	3.51	3.52	3.54	3.55	3.56	3.57	3.58	3.60	3.61	3.62
30	3.63	3.64	3.66	3.67	3.68	3.69	3.70	3.72	3.73	3.74
31	3.75	3.76	3.78	3.79	3.80	3.81	3.83	3.84	3.85	3.86
32	3.87	3.89	3.90	3.91	3.92	3.93	3.95	3.96	3.97	3.98
33	3.99	4.01	4.02	4.03	4.04	4.06	4.07	4.08	4.09	4.10
34	4.12	4.13	4.14	4.15	4.16	4.18	4.19	4.20	4.21	4.22
35	4.24	4.25	4.26	4.27	4.29	4.30	4.31	4.32	4.33	4.35
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**

Centi-grade Degrees.	BAROMETER : 755mm. (from 752.51 to 757.50). Tenths of Degrees.									
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**
○	Millim.	Millim.	Millim.	Millim.	Millim	Millim.	Millim.	Millim.	Millim.	Millim.
0	0.00	0.01	0.02	0.04	0.05	0.06	0.07	0.09	0.10	0.11
1	0.12	0.13	0.15	0.16	0.17	0.18	0.19	0.21	0.22	0.23
2	0.24	0.26	0.27	0.28	0.29	0.30	0.32	0.33	0.34	0.35
3	0.37	0.38	0.39	0.40	0.41	0.43	0.44	0.45	0.46	0.48
4	0.49	0.50	0.51	0.52	0.54	0.55	0.56	0.57	0.58	0.60
5	0.61	0.62	0.63	0.65	0.66	0.67	0.68	0.69	0.71	0.72
6	0.73	0.74	0.76	0.77	0.78	0.79	0.80	0.82	0.83	0.84
7	0.85	0.87	0.88	0.89	0.90	0.91	0.93	0.94	0.95	0.96
8	0.97	0.99	1.00	1.01	1.02	1.04	1.05	1.06	1.07	1.08
9	1.10	1.11	1.12	1.13	1.15	1.16	1.17	1.18	1.19	1.21
10	1.22	1.23	1.24	1.26	1.27	1.28	1.29	1.30	1.32	1.33
11	1.34	1.35	1.36	1.38	1.39	1.40	1.41	1.43	1.44	1.45
12	1.46	1.47	1.49	1.50	1.51	1.52	1.54	1.55	1.56	1.57
13	1.58	1.60	1.61	1.62	1.63	1.65	1.66	1.67	1.68	1.69
14	1.71	1.72	1.73	1.74	1.75	1.77	1.78	1.79	1.80	1.82
15	1.83	1.84	1.85	1.86	1.88	1.89	1.90	1.91	1.93	1.94
16	1.95	1.96	1.97	1.99	2.00	2.01	2.02	2.04	2.05	2.06
17	2.07	2.08	2.10	2.11	2.12	2.13	2.14	2.16	2.17	2.18
18	2.19	2.21	2.22	2.23	2.24	2.25	2.27	2.28	2.29	2.30
19	2.32	2.33	2.34	2.35	2.36	2.38	2.39	2.40	2.41	2.42
20	2.44	2.45	2.46	2.47	2.49	2.50	2.51	2.52	2.53	2.55
21	2.56	2.57	2.58	2.60	2.61	2.62	2.63	2.64	2.66	2.67
22	2.68	2.69	2.71	2.72	2.73	2.74	2.75	2.77	2.78	2.79
23	2.80	2.81	2.83	2.84	2.85	2.86	2.88	2.89	2.90	2.91
24	2.92	2.94	2.95	2.96	2.97	2.99	3.00	3.01	3.02	3.03
25	3.05	3.06	3.07	3.08	3.10	3.11	3.12	3.13	3.14	3.16
26	3.17	3.18	3.19	3.20	3.22	3.23	3.24	3.25	3.27	3.28
27	3.29	3.30	3.31	3.33	3.34	3.35	3.36	3.38	3.39	3.40
28	3.41	3.42	3.44	3.45	3.46	3.47	3.49	3.50	3.51	3.52
29	3.53	3.55	3.56	3.57	3.58	3.59	3.61	3.62	3.63	3.64
30	3.66	3.67	3.68	3.69	3.70	3.72	3.73	3.74	3.75	3.77
31	3.78	3.79	3.80	3.81	3.83	3.84	3.85	3.86	3.88	3.89
32	3.90	3.91	3.92	3.94	3.95	3.96	3.97	3.98	4.00	4.01
33	4.02	4.03	4.05	4.06	4.07	4.08	4.09	4.11	4.12	4.13
34	4.14	4.16	4.17	4.18	4.19	4.20	4.22	4.23	4.24	4.25
35	4.26	4.28	4.29	4.30	4.31	4.33	4.34	4.35	4.36	4.37
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**

Centigrade Degrees.	BAROMETER: 760mm. (from 757.51 to 762.50). Tenths of Degrees.									
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**
○	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.
0	0.00	0.01	0.02	0.04	0.05	0.06	0.07	0.09	0.10	0.11
1	0.12	0.13	0.15	0.16	0.17	0.18	0.20	0.21	0.22	0.23
2	0.25	0.26	0.27	0.28	0.29	0.31	0.32	0.33	0.34	0.36
3	0.37	0.38	0.39	0.40	0.42	0.43	0.44	0.45	0.47	0.48
4	0.49	0.50	0.52	0.53	0.54	0.55	0.56	0.58	0.59	0.60
5	0.61	0.63	0.64	0.65	0.66	0.67	0.69	0.70	0.71	0.72
6	0.74	0.75	0.76	0.77	0.79	0.80	0.81	0.82	0.83	0.85
7	0.86	0.87	0.88	0.90	0.91	0.92	0.93	0.94	0.96	0.97
8	0.98	0.99	1.01	1.02	1.03	1.04	1.05	1.07	1.08	1.09
9	1.10	1.12	1.13	1.14	1.15	1.17	1.18	1.19	1.20	1.21
10	1.23	1.24	1.25	1.26	1.28	1.29	1.30	1.31	1.32	1.34
11	1.35	1.36	1.37	1.39	1.40	1.41	1.42	1.44	1.45	1.46
12	1.47	1.48	1.50	1.51	1.52	1.53	1.55	1.56	1.57	1.58
13	1.59	1.61	1.62	1.63	1.64	1.66	1.67	1.68	1.69	1.71
14	1.72	1.73	1.74	1.75	1.77	1.78	1.79	1.80	1.82	1.83
15	1.84	1.85	1.86	1.88	1.89	1.90	1.91	1.93	1.94	1.95
16	1.96	1.97	1.99	2.00	2.01	2.02	2.04	2.05	2.06	2.07
17	2.09	2.10	2.11	2.12	2.13	2.15	2.16	2.17	2.18	2.20
18	2.21	2.22	2.23	2.24	2.26	2.27	2.28	2.29	2.31	2.32
19	2.33	2.34	2.36	2.37	2.38	2.39	2.40	2.42	2.43	2.44
20	2.45	2.47	2.48	2.49	2.50	2.51	2.53	2.54	2.55	2.56
21	2.58	2.59	2.60	2.61	2.63	2.64	2.65	2.66	2.67	2.69
22	2.70	2.71	2.72	2.74	2.75	2.76	2.77	2.78	2.80	2.81
23	2.82	2.83	2.85	2.86	2.87	2.88	2.89	2.91	2.92	2.93
24	2.94	2.96	2.97	2.98	2.99	3.01	3.02	3.03	3.04	3.05
25	3.07	3.08	3.09	3.10	3.12	3.13	3.14	3.15	3.16	3.18
26	3.19	3.20	3.21	3.23	3.24	3.25	3.26	3.28	3.29	3.30
27	3.31	3.32	3.34	3.35	3.36	3.37	3.39	3.40	3.41	3.42
28	3.43	3.45	3.46	3.47	3.48	3.50	3.51	3.52	3.53	3.54
29	3.56	3.57	3.58	3.59	3.61	3.62	3.63	3.64	3.66	3.67
30	3.68	3.69	3.70	3.72	3.73	3.74	3.75	3.77	3.78	3.79
31	3.80	3.81	3.83	3.84	3.85	3.86	3.88	3.89	3.90	3.91
32	3.93	3.94	3.95	3.96	3.97	3.99	4.00	4.01	4.02	4.04
33	4.05	4.06	4.07	4.08	4.10	4.11	4.12	4.13	4.15	4.16
34	4.17	4.18	4.20	4.21	4.22	4.23	4.24	4.26	4.27	4.28
35	4.29	4.31	4.32	4.33	4.34	4.35	4.37	4.38	4.39	4.40
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**

BAROMETER : 765$^{mm.}$ (from 762.51 to 767.50).

Centigrade Degrees	Tenths of Degrees.									
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**
°	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.
0	0.00	0.01	0.02	0.04	0.05	0.06	0.07	0.09	0.10	0.11
1	0.12	0.14	0.15	0.16	0.17	0.19	0.20	0.21	0.22	0.23
2	0.25	0.26	0.27	0.28	0.30	0.31	0.32	0.33	0.35	0.36
3	0.37	0.38	0.40	0.41	0.42	0.43	0.44	0.46	0.47	0.48
4	0.49	0.51	0.52	0.53	0.54	0.56	0.57	0.58	0.59	0.61
5	0.62	0.63	0.64	0.65	0.67	0.68	0.69	0.70	0.72	0.73
6	0.74	0.75	0.77	0.78	0.79	0.80	0.82	0.83	0.84	0.85
7	0.86	0.88	0.89	0.90	0.91	0.93	0.94	0.95	0.96	0.98
8	0.99	1.00	1.01	1.02	1.04	1.05	1.06	1.07	1.09	1.10
9	1.11	1.12	1.14	1.15	1.16	1.17	1.19	1.20	1.21	1.22
10	1.23	1.25	1.26	1.27	1.28	1.30	1.31	1.32	1.33	1.35
11	1.36	1.37	1.38	1.40	1.41	1.42	1.43	1.44	1.46	1.47
12	1.48	1.49	1.51	1.52	1.53	1.54	1.56	1.57	1.58	1.59
13	1.61	1.62	1.63	1.64	1.65	1.67	1.68	1.69	1.70	1.72
14	1.73	1.74	1.75	1.77	1.78	1.79	1.80	1.82	1.83	1.84
15	1.85	1.86	1.88	1.89	1.90	1.91	1.93	1.94	1.95	1.96
16	1.98	1.99	2.00	2.01	2.02	2.04	2.05	2.06	2.07	2.09
17	2.10	2.11	2.12	2.14	2.15	2.16	2.17	2.19	2.20	2.21
18	2.22	2.23	2.25	2.26	2.27	2.28	2.30	2.31	2.32	2.33
19	2.35	2.36	2.37	2.38	2.40	2.41	2.42	2.43	2.44	2.46
20	2.47	2.48	2.49	2.51	2.52	2.53	2.54	2.56	2.57	2.58
21	2.59	2.61	2.62	2.63	2.64	2.65	2.67	2.68	2.69	2.70
22	2.72	2.73	2.74	2.75	2.77	2.78	2.79	2.80	2.82	2.83
23	2.84	2.85	2.86	2.88	2.89	2.90	2.91	2.93	2.94	2.95
24	2.96	2.98	2.99	3.00	3.01	3.03	3.04	3.05	3.06	3.07
25	3.09	3.10	3.11	3.12	3.14	3.15	3.16	3.17	3.19	3.20
26	3.21	3.22	3.23	3.25	3.26	3.27	3.28	3.30	3.31	3.32
27	3.33	3.35	3.36	3.37	3.38	3.40	3.41	3.42	3.43	3.44
28	3.46	3.47	3.48	3.49	3.51	3.52	3.53	3.54	3.56	3.57
29	3.58	3.59	3.61	3.62	3.63	3.64	3.65	3.67	3.68	3.69
30	3.70	3.72	3.73	3.74	3.75	3.77	3.78	3.79	3.80	3.82
31	3.83	3.84	3.85	3.86	3.88	3.89	3.90	3.91	3.93	3.94
32	3.95	3.96	3.98	3.99	4.00	4.01	4.03	4.04	4.05	4.06
33	4.07	4.09	4.10	4.11	4.12	4.14	4.15	4.16	4.17	4.19
34	4.20	4.21	4.22	4.24	4.25	4.26	4.27	4.28	4.30	4.31
35	4.32	4.33	4.35	4.36	4.37	4.38	4.40	4.41	4.42	4.43
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**

BAROMETER : 770mm. (from 767.51 to 772.50).

Centigrade Degrees.	Tenths of Degrees.									
	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.
°	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.
0	0.00	0.01	0.02	0.04	0.05	0.06	0.07	0.09	0.10	0.11
1	0.12	0.14	0.15	0.16	0.17	0.19	0.20	0.21	0.22	0.24
2	0.25	0.26	0.27	0.29	0.30	0.31	0.32	0.34	0.35	0.36
3	0.37	0.39	0.40	0.41	0.42	0.43	0.45	0.46	0.47	0.48
4	0.50	0.51	0.52	0.53	0.55	0.56	0.57	0.58	0.60	0.61
5	0.62	0.63	0.65	0.66	0.67	0.68	0.70	0.71	0.72	0.73
6	0.75	0.76	0.77	0.78	0.80	0.81	0.82	0.83	0.85	0.86
7	0.87	0.88	0.89	0.91	0.92	0.93	0.94	0.96	0.97	0.98
8	0.99	1.01	1.02	1.03	1.04	1.06	1.07	1.08	1.09	1.11
9	1.12	1.13	1.14	1.16	1.17	1.18	1.19	1.21	1.22	1.23
10	1.24	1.26	1.27	1.28	1.29	1.30	1.32	1.33	1.34	1.35
11	1.37	1.38	1.39	1.40	1.42	1.43	1.44	1.45	1.47	1.48
12	1.49	1.50	1.52	1.53	1.54	1.55	1.57	1.58	1.59	1.60
13	1.62	1.63	1.64	1.65	1.67	1.68	1.69	1.70	1.72	1.73
14	1.74	1.75	1.76	1.78	1.79	1.80	1.81	1.83	1.84	1.85
15	1.86	1.88	1.89	1.90	1.91	1.93	1.94	1.95	1.96	1.98
16	1.99	2.00	2.01	2.03	2.04	2.05	2.06	2.08	2.09	2.10
17	2.11	2.13	2.14	2.15	2.16	2.17	2.19	2.20	2.21	2.22
18	2.24	2.25	2.26	2.27	2.29	2.30	2.31	2.32	2.34	2.35
19	2.36	2.37	2.39	2.40	2.41	2.42	2.44	2.45	2.46	2.47
20	2.49	2.50	2.51	2.52	2.54	2.55	2.56	2.57	2.58	2.60
21	2.61	2.62	2.63	2.65	2.66	2.67	2.68	2.70	2.71	2.72
22	2.73	2.75	2.76	2.77	2.78	2.80	2.81	2.82	2.83	2.85
23	2.86	2.87	2.88	2.90	2.91	2.92	2.93	2.95	2.96	2.97
24	2.98	3.00	3.01	3.02	3.03	3.04	3.06	3.07	3.08	3.09
25	3.11	3.12	3.13	3.14	3.16	3.17	3.18	3.19	3.21	3.22
26	3.23	3.24	3.26	3.27	3.28	3.29	3.31	3.32	3.33	3.34
27	3.36	3.37	3.38	3.39	3.41	3.42	3.43	3.44	3.45	3.47
28	3.48	3.49	3.50	3.52	3.53	3.54	3.55	3.57	3.58	3.59
29	3.60	3.62	3.63	3.64	3.65	3.67	3.68	3.69	3.70	3.72
30	3.73	3.74	3.75	3.77	3.78	3.79	3.80	3.82	3.83	3.84
31	3.85	3.87	3.88	3.89	3.90	3.91	3.93	3.94	3.95	3.96
32	3.98	3.99	4.00	4.01	4.03	4.04	4.05	4.06	4.08	4.09
33	4.10	4.11	4.13	4.14	4.15	4.16	4.18	4.19	4.20	4.21
34	4.23	4.24	4.25	4.26	4.28	4.29	4.30	4.31	4.32	4.34
35	4.35	4.36	4.37	4.39	4.40	4.41	4.42	4.44	4.45	4.46
	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.

BAROMETER : 775$^{mm.}$ (from 772.51 to 777.50).

Centigrade Degrees.	Tenths of Degrees.									
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**
°	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.
0	0.00	0.01	0.03	0.04	0.05	0.06	0.08	0.09	0.10	0.11
1	0.13	0.14	0.15	0.16	0.18	0.19	0.20	0.21	0.23	0.24
2	0.25	0.26	0.28	0.29	0.30	0.31	0.33	0.34	0.35	0.36
3	0.38	0.39	0.40	0.41	0.43	0.44	0.45	0.46	0.48	0.49
4	0.50	0.51	0.53	0.54	0.55	0.56	0.58	0.59	0.60	0.61
5	0.63	0.64	0.65	0.66	0.68	0.69	0.70	0.71	0.73	0.74
6	0.75	0.76	0.78	0.79	0.80	0.81	0.83	0.84	0.85	0.86
7	0.88	0.89	0.90	0.91	0.93	0.94	0.95	0.96	0.98	0.99
8	1.00	1.01	1.03	1.04	1.05	1.06	1.08	1.09	1.10	1.11
9	1.13	1.14	1.15	1.16	1.18	1.19	1.20	1.21	1.23	1.24
10	1.25	1.26	1.28	1.29	1.30	1.31	1.33	1.34	1.35	1.36
11	1.38	1.39	1.40	1.41	1.43	1.44	1.45	1.46	1.48	1.49
12	1.50	1.51	1.53	1.54	1.55	1.56	1.58	1.59	1.60	1.61
13	1.63	1.64	1.65	1.66	1.68	1.69	1.70	1.71	1.73	1.74
14	1.75	1.76	1.78	1.79	1.80	1.81	1.83	1.84	1.85	1.86
15	1.88	1.89	1.90	1.91	1.93	1.94	1.95	1.96	1.98	1.99
16	2.00	2.01	2.03	2.04	2.05	2.06	2.08	2.09	2.10	2.11
17	2.13	2.14	2.15	2.16	2.18	2.19	2.20	2.21	2.23	2.24
18	2.25	2.26	2.28	2.29	2.30	2.31	2.33	2.34	2.35	2.36
19	2.38	2.39	2.40	2.41	2.43	2.44	2.45	2.46	2.48	2.49
20	2.50	2.51	2.53	2.54	2.55	2.56	2.58	2.59	2.60	2.61
21	2.63	2.64	2.65	2.66	2.68	2.69	2.70	2.71	2.73	2.74
22	2.75	2.76	2.78	2.79	2.80	2.81	2.83	2.84	2.85	2.86
23	2.88	2.89	2.90	2.91	2.93	2.94	2.95	2.96	2.98	2.99
24	3.00	3.01	3.03	3.04	3.05	3.06	3.08	3.09	3.10	3.11
25	3.13	3.14	3.15	3.16	3.18	3.19	3.20	3.21	3.23	3.24
26	3.25	3.26	3.28	3.29	3.30	3.31	3.33	3.34	3.35	3.36
27	3.38	3.39	3.40	3.41	3.43	3.44	3.45	3.46	3.48	3.49
28	3.50	3.51	3.53	3.54	3.55	3.56	3.58	3.59	3.60	3.61
29	3.63	3.64	3.65	3.66	3.68	3.69	3.70	3.72	3.73	3.74
30	3.75	3.77	3.78	3.79	3.80	3.82	3.83	3.84	3.85	3.87
31	3.88	3.89	3.90	3.92	3.93	3.94	3.95	3.97	3.98	3.99
32	4.00	4.02	4.03	4.04	4.05	4.07	4.08	4.09	4.10	4.12
33	4.13	4.14	4.15	4.17	4.18	4.19	4.20	4.22	4.23	4.24
34	4.25	4.27	4.28	4.29	4.30	4.32	4.33	4.34	4.35	4.37
35	4.38	4.39	4.40	4.42	4.43	4.44	4.45	4.47	4.48	4.49
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**

Centigrade Degrees.	BAROMETER : 780mm. (from 777.51 to 782.50). Tenths of Degrees.									
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**
°	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.
0	0.00	0.01	0.03	0.04	0.05	0.06	0.08	0.09	0.10	0.11
1	0.13	0.14	0.15	0.16	0.18	0.19	0.20	0.21	0.23	0.24
2	0.25	0.26	0.28	0.29	0.30	0.31	0.33	0.34	0.35	0.37
3	0.38	0.39	0.40	0.42	0.43	0.44	0.45	0.47	0.48	0.49
4	0.50	0.52	0.53	0.54	0.55	0.57	0.58	0.59	0.60	0.62
5	0.63	0.64	0.65	0.67	0.68	0.69	0.70	0.72	0.73	0.74
6	0.76	0.77	0.78	0.79	0.81	0.82	0.83	0.84	0.86	0.87
7	0.88	0.89	0.91	0.92	0.93	0.94	0.96	0.97	0.98	0.99
8	1.01	1.02	1.03	1.04	1.06	1.07	1.08	1.10	1.11	1.12
9	1.13	1.15	1.16	1.17	1.18	1.20	1.21	1.22	1.23	1.25
10	1.26	1.27	1.28	1.30	1.31	1.32	1.33	1.35	1.36	1.37
11	1.38	1.40	1.41	1.42	1.44	1.45	1.46	1.47	1.49	1.50
12	1.51	1.52	1.54	1.55	1.56	1.57	1.59	1.60	1.61	1.62
13	1.64	1.65	1.66	1.67	1.69	1.70	1.71	1.72	1.74	1.75
14	1.76	1.78	1.79	1.80	1.81	1.83	1.84	1.85	1.86	1.88
15	1.89	1.90	1.91	1.93	1.94	1.95	1.96	1.98	1.99	2.00
16	2.01	2.03	2.04	2.05	2.06	2.08	2.09	2.10	2.11	2.13
17	2.14	2.15	2.17	2.18	2.19	2.20	2.22	2 23	2.24	2.25
18	2.27	2.28	2.29	2.30	2.32	2.33	2.34	2.35	2.37	2.38
19	2.39	2.40	2.42	2.43	2.44	2.45	2.47	2.48	2.49	2.51
20	2.52	2.53	2.54	2.56	2.57	2.58	2.59	2.61	2.62	2.63
21	2.64	2.66	2.67	2.68	2.69	2.71	2.72	2.73	2.74	2.76
22	2.77	2.78	2.79	2.81	2.82	2.83	2.85	2.86	2.87	2.88
23	2.90	2.91	2.92	2.93	2.95	2.96	2.97	2.98	3.00	3.01
24	3.02	3.03	3.05	3.06	3.07	3.08	3.10	3.11	3.12	3.14
25	3.15	3.16	3.17	3.19	3.20	3.21	3.22	3.24	3.25	3.26
26	3.27	3.29	3.30	3.31	3.32	3.34	3.35	3.36	3.37	3.39
27	3.40	3.41	3.42	3.44	3.45	3.46	3.47	3.49	3.50	3.51
28	3.52	3.54	3.55	3.56	3.58	3.59	3.60	3.61	3.63	3.64
29	3.65	3.66	3.68	3.69	3.70	3.71	3.73	3.74	3.75	3.76
30	3.78	3.79	3.80	3.81	3.83	3.84	3.85	3.86	3.88	3.89
31	3.90	3.92	3.93	3.94	3.95	3.97	3.98	3.99	4.00	4.02
32	4.03	4.04	4.05	4.07	4.08	4.09	4.10	4.12	4.13	4.14
33	4.15	4.17	4.18	4.19	4.20	4.22	4.23	4.24	4.26	4.27
34	4.28	4.29	4.31	4.32	4.33	4.34	4.36	4.37	4.38	4.39
35	4.41	4.42	4.43	4.44	4.46	4.47	4.48	4.49	4.51	4.52
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**

Centigrade Degrees.	BAROMETER : 785mm. (from 782.51 to 787.50). Tenths of Degrees.									
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**
°	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.
0	0.00	0.01	0.03	0.04	0.05	0.06	0.08	0.09	0.10	0.11
1	0.13	0.14	0.15	0.16	0.18	0.19	0.20	0.22	0.23	0.24
2	0.25	0.27	0.28	0.29	0.30	0.32	0.33	0.34	0.35	0.37
3	0.38	0.39	0.41	0.42	0.43	0.44	0.46	0.47	0.48	0.49
4	0.51	0.52	0.53	0.54	0.56	0.57	0.58	0.60	0.61	0.62
5	0.63	0.65	0.66	0.67	0.68	0.70	0.71	0.72	0.73	0.75
6	0.76	0.77	0.79	0.80	0.81	0.82	0.84	0.85	0.86	0.87
7	0.89	0.90	0.91	0.92	0.94	0.95	0.96	0.98	0.99	1.00
8	1.01	1.03	1.04	1.05	1.06	1.08	1.09	1.10	1.11	1.13
9	1.14	1.15	1.17	1.18	1.19	1.20	1.22	1.23	1.24	1.25
10	1.27	1.28	1.29	1.30	1.32	1.33	1.34	1.36	1.37	1.38
11	1.39	1.41	1.42	1.43	1.44	1.46	1.47	1.48	1.50	1.51
12	1.52	1.53	1.55	1.56	1.57	1.58	1.60	1.61	1.62	1.63
13	1.65	1.66	1.67	1.69	1.70	1.71	1.72	1.74	1.75	1.76
14	1.77	1.79	1.80	1.81	1.82	1.84	1.85	1.86	1.88	1.89
15	1.90	1.91	1.93	1.94	1.95	1.96	1.98	1.99	2.00	2.01
16	2.03	2.04	2.05	2.07	2.08	2.09	2.10	2.12	2.13	2.14
17	2.15	2.17	2.18	2.19	2.20	2.22	2.23	2.24	2.26	2.27
18	2.28	2.29	2.31	2.32	2.33	2.34	2.36	2.37	2.38	2.39
19	2.41	2.42	2.43	2.45	2.46	2.47	2.48	2.50	2.51	2.52
20	2.53	2.55	2.56	2.57	2.58	2.60	2.61	2.62	2.64	2.65
21	2.66	2.67	2.69	2.70	2.71	2.72	2.74	2.75	2.76	2.77
22	2.79	2.80	2.81	2.83	2.84	2.85	2.86	2.88	2.89	2.90
23	2.91	2.93	2.94	2.95	2.96	2.98	2.99	3.00	3.02	3.03
24	3.04	3.05	3.07	3.08	3.09	3.10	3.12	3.13	3.14	3.15
25	3.17	3.18	3.19	3.21	3.22	3.23	3.24	3.26	3.27	3.28
26	3.29	3.31	3.32	3.33	3.34	3.36	3.37	3.38	3.40	3.41
27	3.42	3.43	3.45	3.46	3.47	3.48	3.50	3.51	3.52	3.53
28	3.55	3.56	3.57	3.59	3.60	3.61	3.62	3.64	3.65	3.66
29	3.67	3.69	3.70	3.71	3.72	3.74	3.75	3.76	3.78	3.79
30	3.80	3.81	3.83	3.84	3.85	3.86	3.88	3.89	3.90	3.91
31	3.93	3.94	3.95	3.97	3.98	3.99	4.00	4.02	4.03	4.04
32	4.05	4.07	4.08	4.09	4.11	4.12	4.13	4.14	4.16	4.17
33	4.18	4.19	4.21	4.22	4.23	4.24	4.26	4.27	4.28	4.30
34	4.31	4.32	4.33	4.35	4.36	4.37	4.38	4.40	4.41	4.42
35	4.43	4.45	4.46	4.47	4.49	4.50	4.51	4.52	4.54	4.55
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**

BAROMETER : 790$^{mm.}$ (from 787.51 to 792.50).

Centigrade Degrees.	Tenths of Degrees.									
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**
°	Millim.	Millim.	Millim.	Millim.	Millim	Millim.	Millim.	Millim.	Millim.	Millim.
0	0.00	0.01	0.03	0.04	0.05	0.06	0.08	0.09	0.10	0.11
1	0.13	0.14	0.15	0.17	0.18	0.19	0.20	0.22	0.23	0.24
2	0.26	0.27	0.28	0.29	0.31	0.32	0.33	0.34	0.36	0.37
3	0.38	0.40	0.41	0.42	0.43	0.45	0.46	0.47	0.48	0.50
4	0.51	0.52	0.54	0.55	0.56	0.57	0.59	0.60	0.61	0.62
5	0.64	0.65	0.66	0.68	0.69	0.70	0.71	0.73	0.74	0.75
6	0.77	0.78	0.79	0.80	0.82	0.83	0.84	0.85	0.87	0.88
7	0.89	0.91	0.92	0.93	0.94	0.96	0.97	0.98	0.99	1.01
8	1.02	1.03	1.05	1.06	1.07	1.08	1.10	1.11	1.12	1.13
9	1.15	1.16	1.17	1.19	1.20	1.21	1.22	1.24	1.25	1.26
10	1.28	1.29	1.30	1.31	1.33	1.34	1.35	1.36	1.38	1.39
11	1.40	1.42	1.43	1.44	1.45	1.47	1.48	1.49	1.50	1.52
12	1.53	1.54	1.56	1.57	1.58	1.59	1.61	1.62	1.63	1.64
13	1.66	1.67	1.68	1.70	1.71	1.72	1.73	1.75	1.76	1.77
14	1.79	1.80	1.81	1.82	1.84	1.85	1.86	1.87	1.89	1.90
15	1.91	1.93	1.94	1.95	1.96	1.98	1.99	2.00	2.01	2.03
16	2.04	2.05	2.07	2.08	2.09	2.10	2.12	2.13	2.14	2.15
17	2.17	2.18	2.19	2.21	2.22	2.23	2.24	2.26	2.27	2.28
18	2.30	2.31	2.32	2.33	2.35	2.36	2.37	2.38	2.40	2.41
19	2.42	2.44	2.45	2.46	2.47	2.49	2.50	2.51	2.52	2.54
20	2.55	2.56	2.58	2.59	2.60	2.61	2.63	2.64	2.65	2.66
21	2.68	2.69	2.70	2.72	2.73	2.74	2.75	2.77	2.78	2.79
22	2.81	2.82	2.83	2.84	2.86	2.87	2.88	2.89	2.91	2.92
23	2.93	2.95	2.96	2.97	2.98	3.00	3.01	3.02	3.03	3.05
24	3.06	3.07	3.09	3.10	3.11	3.12	3.14	3.15	3.16	3.17
25	3.19	3.20	3.21	3.23	3.24	3.25	3.26	3.28	3.29	3.30
26	3.32	3.33	3.34	3.35	3.37	3.38	3.39	3.40	3.42	3.43
27	3.44	3.46	3.47	3.48	3.49	3.51	3.52	3.53	3.54	3.56
28	3.57	3.58	3.60	3.61	3.62	3.63	3.65	3.66	3.67	3.68
29	3.70	3.71	3.72	3.74	3.75	3.76	3.77	3.79	3.80	3.81
30	3.83	3.84	3.85	3.86	3.88	3.89	3.90	3.91	3.93	3.94
31	3.95	3.97	3.98	3.99	4.00	4.02	4.03	4.04	4.05	4.07
32	4.08	4.09	4.11	4.12	4.13	4.14	4.16	4.17	4.18	4.19
33	4.21	4.22	4.23	4.25	4.26	4.27	4.28	4.30	4.31	4.32
34	4.34	4.35	4.36	4.37	4.39	4.40	4.41	4.42	4.44	4.45
35	4.46	4.48	4.49	4.50	4.51	4.53	4.54	4.55	4.56	4.58
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**

BAROMETER: 795mm. (from 792.51 to 797.50).

Centigrade Degrees.	Tenths of Degrees.									
	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.
°	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.
0	0.00	0.01	0.03	0.04	0.05	0.06	0.08	0.09	0.10	0.12
1	0.13	0.14	0.15	0.17	0.18	0.19	0.21	0.22	0.23	0.24
2	0.26	0.27	0.28	0.30	0.31	0.32	0.33	0.35	0.36	0.37
3	0.38	0.40	0.41	0.42	0.44	0.45	0.46	0.47	0.49	0.50
4	0.51	0.53	0.54	0.55	0.56	0.58	0.59	0.60	0.62	0.63
5	0.64	0.65	0.67	0.68	0.69	0.71	0.72	0.73	0.74	0.76
6	0.77	0.78	0.80	0.81	0.82	0.83	0.85	0.86	0.87	0.89
7	0.90	0.91	0.92	0.94	0.95	0.96	0.98	0.99	1.00	1.01
8	1.03	1.04	1.05	1.06	1.08	1.09	1.10	1.12	1.13	1.14
9	1.15	1.17	1.18	1.19	1.21	1.22	1.23	1.24	1.26	1.27
10	1.28	1.30	1.31	1.32	1.33	1.35	1.36	1.37	1.39	1.40
11	1.41	1.42	1.44	1.45	1.46	1.48	1.49	1.50	1.51	1.53
12	1.54	1.55	1.57	1.58	1.59	1.60	1.62	1.63	1.64	1.66
13	1.67	1.68	1.69	1.71	1.72	1.73	1.75	1.76	1.77	1.78
14	1.80	1.81	1.82	1.83	1.85	1.86	1.87	1.89	1.90	1.91
15	1.92	1.94	1.95	1.96	1.98	1.99	2.00	2.01	2.03	2.04
16	2.05	2.07	2.08	2.09	2.10	2.12	2.13	2.14	2.16	2.17
17	2.18	2.19	2.21	2.22	2.23	2.25	2.26	2.27	2.28	2.30
18	2.31	2.32	2.34	2.35	2.36	2.37	2.39	2.40	2.41	2.43
19	2.44	2.45	2.46	2.48	2.49	2.50	2.51	2.53	2.54	2.55
20	2.57	2.58	2.59	2.60	2.62	2.63	2.64	2.66	2.67	2.68
21	2.69	2.71	2.72	2.73	2.75	2.76	2.77	2.78	2.80	2.81
22	2.82	2.84	2.85	2.86	2.87	2.89	2.90	2.91	2.93	2.94
23	2.95	2.96	2.98	2.99	3.00	3.02	3.03	3.04	3.05	3.07
24	3.08	3.09	3.11	3.12	3.13	3.14	3.16	3.17	3.18	3.19
25	3.21	3.22	3.23	3.25	3.26	3.27	3.28	3.30	3.31	3.32
26	3.34	3.35	3.36	3.37	3.39	3.40	3.41	3.43	3.44	3.45
27	3.46	3.48	3.49	3.50	3.52	3.53	3.54	3.55	3.57	3.58
28	3.59	3.61	3.62	3.63	3.64	3.66	3.67	3.68	3.70	3.71
29	3.72	3.73	3.75	3.76	3.77	3.79	3.80	3.81	3.82	3.84
30	3.85	3.86	3.88	3.89	3.90	3.91	3.93	3.94	3.95	3.96
31	3.98	3.99	4.00	4.02	4.03	4.04	4.05	4.07	4.08	4.09
32	4.11	4.12	4.13	4.14	4.16	4.17	4.18	4.20	4.21	4.22
33	4.23	4.25	4.26	4.27	4.29	4.30	4.31	4.32	4.34	4.35
34	4.36	4.38	4.39	4.40	4.41	4.43	4.44	4.45	4.47	4.48
35	4.49	4.50	4.52	4.53	4.54	4.56	4.57	4.58	4.59	4.61
	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.

Centigrade Degrees.	BAROMETER: 800mm. (from 797.51 to 802.50). Tenths of Degrees.									
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**
°	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.
0	0.00	0.01	0.03	0.04	0.05	0.06	0.08	0.09	0.10	0.12
1	0.13	0.14	0.15	0.17	0.18	0.19	0.21	0.22	0.23	0.25
2	0.26	0.27	0.28	0.30	0.31	0.32	0.34	0.35	0.36	0.37
3	0.39	0.40	0.41	0.43	0.44	0.45	0.46	0.48	0.49	0.50
4	0.52	0.53	0.54	0.56	0.57	0.58	0.59	0.61	0.62	0.63
5	0.65	0.66	0.67	0.68	0.70	0.71	0.72	0.74	0.75	0.76
6	0.77	0.79	0.80	0.81	0.83	0.84	0.85	0.87	0.88	0.89
7	0.90	0.92	0.93	0.94	0.96	0.97	0.98	0.99	1.01	1.02
8	1.03	1.05	1.06	1.07	1.08	1.10	1.11	1.12	1.14	1.15
9	1.16	1.17	1.19	1.20	1.21	1.23	1.24	1.25	1.27	1.28
10	1.29	1.30	1.32	1.33	1.34	1.36	1.37	1.38	1.39	1.41
11	1.42	1.43	1.45	1.46	1.47	1.48	1.50	1.51	1.52	1.54
12	1.55	1.56	1.58	1.59	1.60	1.61	1.63	1.64	1.65	1.67
13	1.68	1.69	1.70	1.72	1.73	1.74	1.76	1.77	1.78	1.79
14	1.81	1.82	1.83	1.85	1.86	1.87	1.89	1.90	1.91	1.92
15	1.94	1.95	1.96	1.98	1.99	2.00	2.01	2.03	2.04	2.05
16	2.07	2.08	2.09	2.10	2.12	2.13	2.14	2.16	2.17	2.18
17	2.20	2.21	2.22	2.23	2.25	2.26	2.27	2.29	2.30	2.31
18	2.32	2.34	2.35	2.36	2.38	2.39	2.40	2.41	2.43	2.44
19	2.45	2.47	2.48	2.49	2.50	2.52	2.53	2.54	2.56	2.57
20	2.58	2.60	2.61	2.62	2.63	2.65	2.66	2.67	2.69	2.70
21	2.71	2.72	2.74	2.75	2.76	2.78	2.79	2.80	2.81	2.83
22	2.84	2.85	2.87	2.88	2.89	2.91	2.92	2.93	2.94	2.96
23	2.97	2.98	3.00	3.01	3.02	3.03	3.05	3.06	3.07	3.09
24	3.10	3.11	3.12	3.14	3.15	3.16	3.18	3.19	3.20	3.22
25	3.23	3.24	3.25	3.27	3.28	3.29	3.31	3.32	3.33	3.34
26	3.36	3.37	3.38	3.40	3.41	3.42	3.43	3.45	3.46	3.47
27	3.49	3.50	3.51	3.52	3.54	3.55	3.56	3.58	3.59	3.60
28	3.62	3.63	3.64	3.65	3.67	3.68	3.69	3.71	3.72	3.73
29	3.74	3.76	3.77	3.78	3.80	3.81	3.82	3.83	3.85	3.86
30	3.87	3.89	3.90	3.91	3.93	3.94	3.95	3.96	3.98	3.99
31	4.00	4.02	4.03	4.04	4.05	4.07	4.08	4.09	4.11	4.12
32	4.13	4.14	4.16	4.17	4.18	4.20	4.21	4.22	4.24	4.25
33	4.26	4.27	4.29	4.30	4.31	4.33	4.34	4.35	4.36	4.38
34	4.39	4.40	4.42	4.43	4.44	4.45	4.47	4.48	4.49	4.51
35	4.52	4.53	4.55	4.56	4.57	4.58	4.60	4.61	4.62	4.64
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**

IX.

OLD FRENCH BAROMETER.

TABLE

FOR

REDUCING TO THE FREEZING POINT THE OBSERVATIONS TAKEN WITH OLD FRENCH BAROMETERS,

PROVIDED WITH BRASS SCALES, EXTENDING FROM THE CISTERN TO THE TOP OF THE MERCURIAL COLUMN; CALCULATED FROM 280 TO 345 LINES, OR FROM 23 INCHES 4 LINES TO 28 INCHES 9 LINES.

By Kaemtz.

Table IX. is taken from Kaemtz's *Lehrbuch der Meteorologie*, Vol. II. p. 236.

The values adopted by Kaemtz for reducing the Old French Barometer are the following: —

Let h = observed height in French lines.

" t = temperature of attached thermometer in degrees of Reaumur.

" m = expansion of mercury between 0 and 80° Reaumur = 0.018018.

" l = linear expansion of brass between 0 and 80° Reaumur = 0.0018782.

The normal temperature of standard being = 13° Reaumur.

And the formula becomes, —

$$-h \cdot \frac{m \times t - l\,(t-13)}{1 + m \times t}$$

The Table gives the corrections only for full degrees and for every fifth line; but the intermediate values can easily be found by an interpolation at sight.

Example of Reduction.

Observed height . . . . . = 325.32 lines.

Attached thermometer . . . . . = 12.5 Reaumur.

In the line beginning with 12°, and in the vertical column headed 325 lines, we find,

Correction for 12° = —0.89 lines.

Interpolation for 0°.5 = —0.03 "

Correction for 12°.5 = —0.92 "

And we have,

Observed height, 325.32 "

Correction for 12°.5, —0.92 "

Height at the freezing point = 324.40 lines.

Normal Temperature of the Scale = 13° Reaumur.

Attached Thermometer. Degrees of Reaumur.	Lines and Decimals. 280	285	290	295	300	305	310	Attached Thermometer. Degrees of Reaumur.
°	Lines.	Lines.	Lines.	Lines.	Lines.	Lines.	Lines.	°
−15	+0.77	+0.78	+0.79	+0.81	+0.82	+0.84	+0.85	−15
−14	0.71	0.73	0.74	0.75	0.76	0.77	0.79	−14
−13	0.65	0.67	0.68	0.69	0.70	0.71	0.72	−13
−12	0.60	0.61	0.62	0.63	0.64	0.65	0.66	−12
−11	0.54	0.55	0.56	0.57	0.58	0.59	0.60	−11
−10	0.48	0.49	0.50	0.51	0.52	0.53	0.54	−10
− 9	+0.43	+0.44	+0.44	+0.45	+0.46	+0.46	+0.47	− 9
− 8	0.37	0.38	0.38	0.39	0.40	0.40	0.41	− 8
− 7	0.31	0.32	0.32	0.33	0.34	0.34	0.35	− 7
− 6	0.26	0.26	0.26	0.27	0.27	0.28	0.28	− 6
− 5	0.20	0.20	0.21	0.21	0.21	0.22	0.22	− 5
− 4	+0.14	+0.15	+0.15	+0.15	+0.15	+0.16	+0.16	− 4
− 3	0.09	0.09	0.09	0.09	0.09	0.09	0.09	− 3
− 2	0.03	0.03	0.03	0.03	0.03	0.03	0.03	− 2
− 1	−0.03	−0.03	−0.03	−0.03	−0.03	−0.03	−0.03	− 1
0	−0.08	−0.09	−0.09	−0.09	−0.09	−0.09	−0.09	0
+ 1	−0.14	−0.14	−0.15	−0.15	−0.15	−0.15	−0.16	+ 1
2	0.20	0.20	0.21	0.21	0.21	0.22	0.22	2
3	0.26	0.26	0.27	0.27	0.27	0.28	0.28	3
4	0.31	0.32	0.32	0.33	0.33	0.34	0.35	4
5	0.37	0.37	0.38	0.39	0.40	0.40	0.41	5
+ 6	−0.43	−0.43	−0.44	−0.45	−0.46	−0.46	−0.47	+ 6
7	0.48	0.49	0.50	0.51	0.52	0.53	0.53	7
8	0.54	0.55	0.56	0.57	0.58	0.59	0.60	8
9	0.60	0.61	0.62	0.63	0.64	0.65	0.66	9
10	0.65	0.66	0.68	0.69	0.70	0.71	0.72	10
+11	−0.71	−0.72	−0.74	−0.75	−0.76	−0.77	−0.79	+11
12	0.77	0.78	0.80	0.81	0.82	0.84	0.85	12
13	0.82	0.84	0.85	0.87	0.88	0.90	0.91	13
14	0.88	0.90	0.91	0.93	0.94	0.96	0.98	14
15	0.94	0.95	0.97	0.99	1.00	1.02	1.04	15
+16	−0.99	−1.01	−1.03	−1.05	−1.07	−1.08	−1.10	+16
17	1.05	1.07	1.09	1.11	1.13	1.15	1.16	17
18	1.11	1.13	1.15	1.17	1.19	1.21	1.23	18
19	1.16	1.18	1.21	1.23	1.25	1.27	1.29	19
20	1.22	1.24	1.27	1.29	1.31	1.33	1.35	20
+21	−1.28	−1.30	−1.33	−1.35	−1.37	−1.39	−1.42	+21
22	1.34	1.36	1.38	1.41	1.43	1.45	1.48	22
23	1.39	1.41	1.44	1.47	1.49	1.52	1.54	23
24	1.45	1.47	1.50	1.53	1.55	1.58	1.60	24
25	1.50	1.53	1.56	1.59	1.61	1.64	1.67	25

Normal Temperature of the Scale = 13° Reaumur.

Attached Thermometer. Degrees of Reaumur.	Lines and Decimals. 315	320	325	330	335	340	345	Attached Thermometer. Degrees of Reaumur.
°	Lines.	Lines.	Lines.	Lines.	Lines.	Lines.	Lines.	°
−15	+0.86	+0.88	+0.89	+0.90	+0.92	+0.93	+0.95	−15
−14	0.80	0.81	0.83	0.84	0.85	0.86	0.88	−14
−13	0.74	0.75	0.76	0.78	0.78	0.79	0.81	−13
−12	0.67	0.68	0.69	0.70	0.71	0.73	0.74	−12
−11	0.61	0.62	0.63	0.64	0.65	0.66	0.67	−11
−10	0.54	0.55	0.56	0.57	0.58	0.59	0.60	−10
− 9	+0.48	+0.49	+0.50	+0.50	+0.51	+0.52	+0.53	− 9
− 8	0.42	0.42	0.43	0.44	0.44	0.45	0.46	− 8
− 7	0.35	0.36	0.36	0.37	0.37	0.38	0.39	− 7
− 6	0.29	0.29	0.30	0.30	0.31	0.31	0.32	− 6
− 5	0.22	0.23	0.23	0.24	0.24	0.24	0.25	− 5
− 4	+0.16	+0.16	+0.17	+0.17	+0.17	+0.17	+0.18	− 4
− 3	0.10	0.10	0.10	0.10	0.10	0.10	0.11	− 3
− 2	0.03	0.03	0.03	0.03	0.03	0.03	0.04	− 2
− 1	−0.03	−0.03	−0.03	−0.03	−0.03	−0.03	−0.03	− 1
0	−0.10	−0.10	−0.10	−0.10	−0.10	−0.10	−0.10	0
+ 1	−0.16	−0.16	−0.16	−0.17	−0.17	−0.17	−0.17	+ 1
2	0.22	0.23	0.23	0.23	0.24	0.24	0.24	2
3	0.29	0.29	0.30	0.30	0.31	0.31	0.31	3
4	0.35	0.36	0.36	0.37	0.37	0.38	0.38	4
5	0.42	0.42	0.43	0.44	0.44	0.45	0.45	5
+ 6	−0.48	−0.49	−0.49	−0.50	−0.51	−0.52	−0.53	+ 6
7	0.54	0.55	0.56	0.57	0.58	0.59	0.60	7
8	0.61	0.62	0.63	0.64	0.65	0.66	0.67	8
9	0.67	0.68	0.69	0.70	0.71	0.72	0.74	9
10	0.74	0.75	0.76	0.77	0.78	0.79	0.81	10
+11	−0.80	−0.81	−0.82	−0.84	−0.85	−0.86	−0.88	+11
12	0.86	0.88	0.89	0.90	0.92	0.93	0.95	12
13	0.93	0.94	0.96	0.97	0.99	1.00	1.02	13
14	0.99	1.01	1.02	1.04	1.05	1.07	1.09	14
15	1.05	1.07	1.09	1.10	1.12	1.14	1.16	15
+16	−1.12	−1.14	−1.15	−1.17	−1.19	−1.21	−1.23	+16
17	1.18	1.20	1.22	1.24	1.26	1.28	1.30	17
18	1.25	1.27	1.29	1.31	1.33	1.35	1.37	18
19	1.31	1.33	1.35	1.37	1.39	1.41	1.44	19
20	1.37	1.40	1.42	1.44	1.46	1.48	1.51	20
+21	−1.44	−1.46	−1.48	−1.51	−1.53	−1.55	−1.58	+21
22	1.50	1.53	1.55	1.57	1.60	1.62	1.65	22
23	1.57	1.59	1.62	1.64	1.67	1.69	1.72	23
24	1.63	1.66	1.68	1.71	1.73	1.76	1.79	24
25	1.69	1.72	1.75	1.78	1.80	1.83	1.86	25

TABLES

FOR CORRECTING THE

DEPRESSION OF THE BAROMETRICAL COLUMN DUE TO THE CAPILLARY ACTION.

Table X., to be found in the Report of the Committee of Physics and Meteorology of the Royal Society of London, 1840, gives the correction to be applied to English barometers for capillary action in boiled and unboiled tubes. It takes into account the diameter of the tube, but not the variations of the height of the meniscus, or of the convexity which terminates the barometrical column. This last element is supposed to be in its *normal state* and *constant*.

Tables XI. and XII., published by Delcros, in the *Annuaire Météorologique de France*, for 1849, give the means of finding the true correction to be applied to metrical barometers for capillary action.

Table XI. shows the normal height of the meniscus when in contact with the air (as is the case in the inferior branch of a syphon barometer), and in the barometric vacuum at the top of the column, in tubes of different bores. It enables the observer to judge better of its variations.

Table XII. has been calculated by Delcros after the formulas of Schleiermacher, making the constant x equal to $6^{mm}.5278$, being the mean value between that of Gay-Lussac $= 6^{mm}.5262$, and that of Schleiermacher $= 6^{mm}.5295$. It gives the amount of the capillary action in millimetres of mercury, taking into account both the size of the bore, or the internal radius of the tube, which will be found in the vertical argument, and the height of the meniscus, given in the horizontal argument. The internal radius of the tube is supposed to be known; the height of the meniscus, or the vertical distance from the base, that is, from the sharp line where the mercury ceases to be in contact with the walls of the tube, to the very top of the convexity, can be ascertained by measuring it several times by means of the vernier.

Example: — Suppose the internal radius of the tube to be $3^{mm}.2$, and the height of the meniscus to be $0^{mm}.8$; seek in the first vertical column the number $3^{mm}.2$; follow then the horizontal line as far as the vertical column headed $0^{mm}.8$, we find there the number $0^{mm}.776$, which is the amount of the depression due to capillary action, or the value of the correction to be *added* to the observation.

X. Table for the Correction to be added to English Barometers for Capillary Action.

Diameter of Tube.	Correction for	
	Unboiled Tubes.	Boiled Tubes.
Inch.	Inch.	Inch.
0.60	0.004	0.002
0.50	0.007	0.003
0.45	0.010	0.005
0.40	0.014	0.007
0.35	0.020	0.010
0.30	0.028	0.014
0.25	0.040	0.020
0.20	0.060	0.029
0.15	0.088	0.044
0.10	0.142	0.070

XI. Table of the Height of the Meniscus of the Barometrical Column.

Internal Radius of the Tube in Millimetres.	Normal Height of the Meniscus in Millimetres.	
	In the Air.	In the Vacuum.
1	0.427	0.34
2	0.795	0.64
3	1.079	0.86
4	1.287	1.03
5	1.413	1.13
6	1.488	1.19
7	1.524	1.22

Radius of the Tube in Millimetres.	Height of the Meniscus in Millimetres.																		Radius of the Tube in Millimetres.
	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	
	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	
1.0	1.268	2.460	3.516	4.396	5.085	"	"	"	"	"	"	"	"	"	"	"	"	"	1.0
1.2	0.876	1.715	2.484	3.162	3.728	4.190	"	"	"	"	"	"	"	"	"	"	"	"	1.2
1.4	0.638	1.256	1.836	2.363	2.825	3.218	3.542	"	"	"	"	"	"	"	"	"	"	"	1.4
1.6	0.484	0.955	1.404	1.820	2.196	2.528	2.812	3.050	"	"	"	"	"	"	"	"	"	"	1.6
1.8	0.378	0.747	1.103	1.437	1.746	2.024	2.270	2.483	2.662	"	"	"	"	"	"	"	"	"	1.8
2.0	0.302	0.598	0.885	1.158	1.413	1.648	1.859	2 046	2.209	2.348	"	"	"	"	"	"	"	"	2.0
2.2	0.245	0.487	0.723	0.948	1.161	1.360	1.541	1.705	1.851	1.978	2.087	"	"	"	"	"	"	"	2.2
2.4	0.203	0.403	0.599	0.787	0.966	1.135	1.292	1.436	1.565	1.680	1.780	1.866	"	"	"	"	"	"	2.4
2.6	0.170	0.337	0.502	0.661	0.813	0.958	1.093	1.218	1.332	1.436	1.528	1.608	1.676	"	"	"	"	"	2.6
2.8	0.143	0.285	0.425	0.560	0.691	0.815	0.932	1.041	1.142	1.235	1.318	1.392	1.456	1.511	"	"	"	"	2.8
3.0	0.122	0.243	0.362	0.478	0.591	0.698	0.800	0.896	0.985	1.068	1.143	1.210	1.270	1.322	1.368	"	"	"	3.0
3.2	0.105	0.209	0.312	0.412	0.509	0.602	0.691	0.776	0.855	0.928	0.995	1.057	1.112	1.161	1.203	1.238	"	"	3.2
3.4	0.091	0.181	0.269	0.356	0.441	0.523	0.601	0.675	0.745	0.810	0.871	0.926	0.976	1.021	1.061	1.095	"	"	3.4
3.6	0.079	0.157	0.234	0.310	0.384	0.455	0.524	0.590	0.652	0.710	0.764	0.814	0.860	0.901	0.938	0.970	"	"	3.6
3.8	0.069	0.137	0.205	0.271	0.336	0.399	0.459	0.517	0.572	0.624	0.673	0.718	0.760	0.797	0.831	0.861	0.887	"	3.8
4.0	0.060	0.120	0.180	0.238	0.295	0.350	0.404	0.455	0.504	0 551	0.594	0.635	0.673	0.707	0.738	0.766	0.790	"	4.0
4.2	0.053	0.106	0.158	0.210	0.260	0.309	0.356	0.402	0.446	0.487	0.526	0.563	0.597	0.628	0.657	0.682	0.705	"	4.2
4.4	0.047	0.094	0.140	0.185	0.230	0.273	0.315	0.356	0.395	0.432	0.467	0.500	0.531	0.559	0.585	0.609	0.630	"	4.4
4.6	0.042	0.083	0.124	0.164	0.204	0.242	0.280	0.316	0.351	0.384	0.416	0.445	0.473	0.499	0.522	0.544	0.563	"	4.6
4.8	0.037	0.074	0.110	0.146	0.181	0.215	0.249	0.281	0.312	0.342	0.370	0.397	0.422	0.445	0.467	0.486	0.504	"	4.8
5.0	0.033	0.065	0.098	0.130	0.161	0.192	0.221	0 250	0.278	0.305	0.330	0.354	0.377	0.398	0.418	0.436	0.452	"	5.0
5.2	0.029	0.058	0.087	0.116	0.144	0 171	0.198	0.224	0.248	0.272	0.295	0.317	0.337	0.356	0.374	0.390	0.405	0.418	5.2
5.4	0.026	0.052	0.078	0.103	0.128	0.153	0.177	0.200	0.222	0.244	0.264	0.284	0.302	0.319	0.336	0.350	0.364	0.376	5.4
5.6	0.023	0.047	0.070	0.092	0.115	0.137	0.158	0.179	0.199	0.218	0.237	0.255	0.271	0.287	0.301	0.315	0.327	0.338	5.6
5.8	0.021	0.042	0.062	0.083	0.103	0.122	0.142	0.160	0.178	0.196	0.213	0.228	0.243	0.257	0.271	0.283	0.294	0.304	5.8
6.0	0.019	0.037	0.056	0.074	0.092	0.110	0.127	0.144	0.160	0.176	0.191	0.205	0.219	0.231	0.243	0.254	0.264	0.273	6.0
6.2	0.017	0.034	0.050	0.067	0.083	0.099	0.114	0.129	0 144	0.158	0.172	0.185	0.197	0.208	0.219	0.229	0.238	0.246	6.2
6.4	0.015	0.030	0.045	0 060	0.074	0.089	0.103	0.116	0.130	0.142	0.154	0.166	0.177	0.187	0.197	0.206	0.214	0.221	6.4
6.6	0.014	0.027	0.041	0.054	0.067	0.080	0.093	0 105	0.117	0.128	0.139	0.150	0.160	0.169	0.178	0.186	0.193	0.200	6.6
6.8	0.012	0.024	0.037	0.049	0.061	0.072	0.084	0.095	0.105	0.116	0.126	0.135	0.144	0.153	0.160	0.168	0.174	0.180	6.8
7.0	0.011	0.022	0.033	0.044	0.055	0.065	0.075	0.085	0.095	0.105	0.114	0.122	0.130	0.138	0.145	0.152	0.158	0.163	7.0

METEOROLOGICAL TABLES.

IV.

HYPSOMETRICAL TABLES.

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HYPSOMETRICAL TABLES.

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TABLES

FOR THE

CALCULATION OF DIFFERENCES OF LEVEL BY MEANS OF BAROMETRICAL OBSERVATIONS.

CALCULATED AFTER THE COMPLETE FORMULA OF LAPLACE,

By M. T. Delcros.

Construction of the Tables.

If we take z = difference of level of the two barometers,
a = earth's mean radius = 6366200 metres,
L = mean latitude between the two stations,

and further: —

At Station.
- Lower.
  - h = observed height of the barometer,
  - T = temperature of the barometer,
  - t = temperature of the air,
- Upper.
  - h' = observed height of the barometer,
  - T′ = temperature of the barometer,
  - t' = temperature of the air,

and if we make finally $H = h + h'. \left(\frac{T-T'}{6196}\right)$,

we shall have, according to Laplace, the following general and complete equation: —

$$z = 18336 \text{ metres} \times \left\{ \begin{array}{l} \left(1 + \frac{2.(t+t')}{1000}\right) \\ (1 + 0.0028371 \cos. 2. L) \\ \left((1 + \frac{z}{a}). \text{ Log. } \left(\frac{h}{H}\right) + \frac{z}{a} 0.868589\right) \end{array} \right\}$$

after the proper transformations this equation becomes: —

$$z = \text{Log. } \left(\frac{h}{H}\right) 18336 \text{ metres} \times \left\{ \begin{array}{l} \left(1 + \frac{2.(t+t')}{1000}\right) \\ (1 + 0.0028371 \cos. 2. L) \\ \left(1 + \frac{\left(\text{log. } \left(\frac{h}{H}\right) + 0.868589\right). \frac{z}{a}}{\text{Log. } \left(\frac{h}{H}\right)}\right) \end{array} \right\}$$

introducing into this expression the value in metres of a, the earth's mean radius, making $z = \text{Log.}\left(\frac{h}{H}\right) 18336$ and $\text{Log.}\left(\frac{h}{H}\right) = \left(\frac{z}{18336}\right)$, which can be done without sensible error, the above formula takes the following form, sufficiently accurate for practical purposes : —

$$z = \text{Log.}\left(\frac{h}{H}\right).\ 18336 \text{ metres} \times \left\{ \begin{array}{l} \left(1 + \frac{2.\ (t+t')}{1000}\right) \\ (1 + 0.0028371\ \text{cos. 2. L}) \\ \left(1 + \frac{z + 15926}{6366200}\right) \end{array} \right\}$$

the four factors of which can easily be developed in tables, as has been done by Mr. Oltmanns. But though this *savant* chose to develop also the second factor, I found better not to do so, partly because the calculation of it is very easy, and also on account of the great extent it would have been necessary to give to this table, in order to avoid troublesome interpolations.

In the calculation of $h'.\left(\frac{T-T'}{6196}\right)$, Mr. Oltmanns used the constant coefficient of the absolute expansion of the mercurial column ; I took that of the relative expansion of the mercury and of the brass scale. It is obvious, therefore, that if the scale of the barometer employed was of wood, glass, iron, or of another substance, it would be necessary to make use of as many different coefficients, and the Table II. could not be used. Moreover, Oltmanns combined the last two factors of the general formula in one single table with double entry. This table I have calculated, extending it sufficiently to avoid a double interpolation ; but as it seemed to me much too extensive, I substituted for it Tables III. and IV., which are more condensed, without rendering any troublesome interpolation necessary.

I carried the calculation of these tables beyond the limits at which Oltmanns chose to stop, in order that they may answer for the most extreme cases.

At the head of each table will be found the factor of which it is the development ; this makes any other explanation superfluous.

All these tables give, at sight, the numbers wanted ; only when very great precision is desired, a slight interpolation, at sight, and very easy to apply, may be required. My principal object was to relieve the calculator of the troublesome and annoying labor of interpolations.

I added to these four tables the small Table V., taken from the *Annuaire du Bureau des Longitudes* of Paris. It will be seldom used.

When calculating the differences of level, in the same order with the tables, and with the complete formula of Laplace, we shall always arrive at results which will never differ by more than one decimetre in the most extreme cases. The following example will illustrate this statement. I take the observation made in a balloon, by Gay-Lussac, at Paris, as an extreme case, which is very well adapted to manifest the errors of the tables, if there were any, by comparing the results obtained by means of them with those of the direct calculation according to the complete formula of Laplace, from which they are derived.

Example of Calculation by the complete Formula of Laplace and by the Tables.
Height of the Balloon of Gay-Lussac.

The observation gave : —

Balloon h' = 328.80 mm.	T' = — 9.5°	t' = — 9.5°
Paris h = 765.68	T = + 30.8	t = + 30.8
	$T - T'$ = + 40.3	$(t + t')$ = + 21.3 et 2 $(t + t')$ = 42°.6

With these data the formula of Laplace gives the following calculation : —

Log. h'. = 328.80	= 2.5169318	
Log. $(T - T')$ = + 40.3	= 1.6053050	
Log. dilat. coefficient = 0.0001614	= 6.2079035	
Corr. a = + 2.14 Milli.	log. = 0.3301403	
h' = 328.80		
H = 330.94	log.	= 2.5197480
	log. h = 765.68	= 2.8840473
(Log. h — Log. H) = Difference of Log.		= 0.3642993
Log. of (Log. h — log. H) =		9.5614583
Log. general coefficient = 18336 =		4.2633046
Log. $\left(\left(\frac{h}{H}\right) 18336\right) = (A + a)$ =		3.8247629
Corresponding number = 6679.79 = $(A + a)$		
Log. cos. 2 L = 97° 40′ = —		9.1251872
Log. constant = 0.0028371 = +		7.4528746
Log. $(A + a)$ = 6679.79. = +		3.8247629
Log. $\left((0.0028371.\ \text{Cos. } 2\ \text{L}) \times (A + a)\right)$ = —		0.4028247
Corresponding number = — 2.53 Milli.		
6679.79		
$(A + a + \beta)$ = 6677.26		
Corr. temp. air = v = 284.45	= (6.677 × 42.6) Metres.	
$(A + a + \beta + v)$ = 6961.71		
Constant =. + 15926		
22887.71	... Log. ...	= 4.3596022
Comp^t. log. a = 6366200	... Log. ...	= 3.1961197
$(A + a + \beta + v)$ = 6961.71	... Log. ...	= 3.8427153
δ = + 25.03	Log. = + 1.3984372	
$(A + a + \beta + v + \delta)$ = 6986.74		
Altitude barom. Paris = 48.70		
Altitude of balloon = 7035.44 by the formula of Laplace.		

Now let us calculate by the tables, placing side by side the corresponding results given by the formula of Laplace.

Balloon	$h' = 328.80$ (Millim.)	$T' = -\ 9.5$ (°)	$t' = -\ 9.5$ (°)
Paris	$h = 765.68$	$T = +\ 30.8$	$t = +\ 30.8$

with $\left\{\begin{matrix} h' = 328.80 \\ h = 765.68 \end{matrix}\right\}$ Table I. gives $\left\{\begin{matrix} 1478.4 \\ 8209.8 \end{matrix}\right.$ (Metres.) By the formula of Laplace we found:

	$A = 6731.4$	
with $(T' - T) = -\ 40°.3$, Table II. gives a	$= -52.0$	
	$(A + a) = 6679.4$	6679.79 (Metres.)
with $L = 48°\ 50'$, Table III. gives a	$= -\ 2.3$	$-\ 2.53$
	$(A + a + \beta) = 6677.1$	6677.26
with $2\ (t + t')$ direct calculation gives v	$= +\ 284.5$	$+\ 284.45$
	$(A + a + \beta + v) = 6961.6$	6961.71
with 6960, Table IV. gives δ	$= +\ 25.1$	$+\ 25.03$
	$(A + a + \beta + v + \delta) = 6986.7$	6986.74
Altitude of barometer at Paris	$= +\ 48.7$	$+\ 48.70$
Therefore altitude of balloon	$= 7035.4$	7035.44

Two results which are sensibly identical. This ought not to astonish us; the tables being the exact development of the formula, they ought to give the same results, provided in both cases nothing has been neglected, and the four factors have been calculated in the same relative order.

DELCROS.

Disposition and Use of the Tables.

The disposition of the tables is the following: —

In Table I., the first column on the left contains the height of the barometer in millimetres, corrected for the error of the instrument.

The second column headed N (number), gives in metres the first two figures of the number corresponding to each height of the barometer in the first column; the third column, headed 0.0, gives the remaining figures for the full number of millimetres; the following columns give the remaining figures for the same number of millimetres and each decimal fraction of a millimetre which may follow it. The value of the hundredths is to be found in the last column.

Example: — Height of Barometer = 761.00.

We look out in the first column for the number 761, and we find on the same line in the second column, 81; in the third column, headed 0.0, or full number, 61.1. The corresponding number is thus 8161.1 metres.

Height of barometer = 761.35.

The second column gives 81; the column headed 0.3 gives, on the same line, 64.2. The corresponding number is then 8164.2. Adding the value of five hundredths of millim., being $0^{mm}.5$, as indicated in the last column, we have 8164.7 metres, corresponding to 761.35 millim.

The other four tables need no further explanation.

To calculate, by means of the tables, a difference of level from two barometrical observations, proceed in the following manner: —

1. Take the height of the barometer at the lower station, or h, and seek in Table I. the number corresponding to this height. Seek likewise the number corresponding to the height of the barometer at the upper station. Subtract the second from the first. The remainder is the approximate difference of level between the two stations. Then apply the following corrections.

2. Correction to be applied for the temperature of the barometers.

If T' be the temperature of the attached thermometer at the upper station, and T that of the attached thermometer at the lower station, take the difference, or $T' - T$, and seek in Table II. the number corresponding to this difference.

When T' is smaller than T, that is, when the temperature of the attached thermometer of the upper station is lower than that of the lower station, the correction is to be *subtracted* from the approximate height; when T' is greater than T, it is to be *added*.

3. Correction for the temperature of the air.

The first correction having been applied, multiply the number obtained, or N, by the double sum of the temperatures of the air at both stations, and divide the product by 1000; the number thus found, or the quantity expressed by $\frac{N}{1000}$. 2 $(t + t')$ is the correction in metres which is to be *added* to the preceding number N.

4. Tables III. and IV. give two corrections; the first due to the decrease of gravitation in latitude, which is to be *added* when the mean latitude of the places of observation is between the 45th parallel and the equator; and to be *subtracted* when it is between the same parallel and the poles, as indicated at the head of the columns. The second correction, due to the decrease of gravitation in the vertical line, is always *additive*.

5. Table V. gives another small correction to be added in the case of the lower station being very elevated above the level of the ocean.

Examples of Calculation.

Measurement of the Height of Guanaxuato. By M. de Humboldt.

Barometer at the upper station,	$h' = 600.95$ mm.	$T' = 21.3$	$t' = 21.3$
Barometer at the level of the sea,	$h = 763.15$	$T = 25.3$	$t = 25.3$

Table I. gives the corresponding numbers,	h = 8183.5 h' = 6280.8	
	Difference,	1902.7
Table II. gives for T′ — T,		— 5.2
	Difference,	1897.5 = N
$\frac{N}{1000}$. 2 $(t + t')$ = 1.897 × 93.2,		+ 176.8
	Sum,	2074.3
Table III. gives for mean latitude of 21°,		+ 4.3
Table IV. gives for decrease of gravitation in the vertical line,		+ 6.0
Hence altitude of Guanaxuato above the ocean,		2084.6

Measurement of the height of Mont Blanc, August 29, 1844. *By MM. Bravais and Martins.*

Barometer at one metre below the summit, h' = 424.05 mm. T′ = — 4.2° t' = — 7.6°
Barometer of the Observatory of Geneva, h = 729.65 T = 18.6 t = 19.3

Table I. gives for numbers corresponding to	h = 7826.0 h' = 3504.4	
	Difference,	4321.6
Table II. gives for T′ — T,		— 29.3
	Difference,	4292.3 = N
$\frac{N}{1000}$. 2 $(t + t')$ = 4292 × 23.4 =		+ 100.4
	Sum,	4392.7
Table III. gives for the mean latitude of 46°,		— 0.4
	Difference,	4392.3
Table IV. for decrease of gravitation in the vertical line		+ 13.7
Table V. for the elevation of the lower station,		+ 0.5
	Sum,	4406.5
Elevation of the lower barometer above the ocean,		407.0
Hence elevation of upper barometer above the ocean,		4813.5
Finally, height of the summit of Mont Blanc above the ocean,		4814.5

TABLE I. — Giving A = 18336 × log. H or *h*...., argument H or *h* in Millimetres.

Barometer *H* or h.	N.	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	Parts for each 0.01mm.
Milli.	Metr.	Metres.	Metres.	Metres.	Metres.	Metres.	Metres.	Metres.	Metres.	Metres.	Metres.	Metr.
288	4	23.4	26.2	28.9	31.7	34.4	37.2	40.0	42.7	45.5	48.2	1 | 0.3
289	4	51.0	53.8	56.5	59.3	62.0	64.8	67.5	70.3	73.0	75.8	2 | 0.5
290	4	78.5	81.3	84.0	86.7	89.5	92.2	95.0	97.7			3 | 0.8
290	5									00.4	03.2	4 | 1.1
291	5	05.9	08.7	11.4	14.1	16.8	19.6	22.3	25.0	27.8	30.5	5 | 1.4
292	5	33.2	36.0	38.7	41.4	44.1	46.8	49.6	52.3	55.0	57.7	6 | 1.6
293	5	60.5	63.2	65.9	68.6	71.3	74.0	76.7	79.5	82.2	84.9	7 | 1.9
294	5	87.6	90.3	93.0	95.7	98.4						8 | 2.2
294	6						01.1	03.8	06.5	09.2	11.9	9 | 2.4
295	6	14.6	17.3	20.0	22.7	25.4	28.1	30.8	33.5	36.2	38.9	
296	6	41.6	44.3	47.0	49.6	52.3	55.0	57.7	60.4	63.1	65.8	
297	6	68.4	71.1	73.8	76.5	79.1	81.8	84.5	87.2	89.9	92.5	
298	6	95.2	97.9									
298	7			00.5	03.2	05.9	08.6	11.2	13.9	16.6	19.2	
299	7	21.9	24.5	27.2	29.9	32.5	35.2	37.8	40.5	43.2	45.8	
300	7	48.5	51.1	53.8	56.4	59.1	61.7	64.4	67.0	69.7	72.3	
301	7	75.0	77.6	80.3	82.9	85.5	88.2	90.8	93.5	96.1	98.7	
302	8	01.4	04.0	06.6	09.3	11.9	14.5	17.2	19.8	22.4	25.1	
303	8	27.7	30.3	33.0	35.6	38.2	40.8	43.5	46.1	48.6	51.3	
304	8	54.0	56.6	59.2	61.8	64.4	67.0	69.6	72.3	74.9	77.5	
305	8	80.1	82.7	85.3	87.9	90.5	93.1	95.7	98.3			
305	9									01.0	03.6	
306	9	06.2	08.8	11.4	14.0	16.6	19.2	21.8	24.4	27.0	29.6	1 | 0.3
307	9	32.1	34.7	37.3	39.9	42.5	45.1	47.7	50.3	52.9	55.5	2 | 0.5
308	9	58.0	60.6	63.2	65.8	68.4	70.9	73.5	76.1	78.7	81.3	3 | 0.8
309	9	83.9	86.4	89.0	91.6	94.1	96.7	99.3				4 | 1.0
309	10								01.9	04.4	07.0	5 | 1.3
310	10	09.6	12.1	14.7	17.3	19.8	22.4	25.0	27.5	30.1	32.7	6 | 1.5
311	10	35.2	37.8	40.3	42.9	45.5	48.0	50.6	53.1	55.7	58.2	7 | 1.8
312	10	60.8	63.3	65.9	68.4	71.0	73.5	76.1	78.6	81.2	83.7	8 | 2.1
313	10	86.3	88.8	91.4	93.9	96.4	99.0					9 | 2.3
313	11							01.5	04.1	06.6	09.1	
314	11	11.7	14.2	16.7	19.3	21.8	24.3	26.9	29.4	31.9	34.5	
315	11	37.0	39.5	42.0	44.6	47.1	49.6	52.1	54.7	57.2	59.7	
316	11	62.2	64.8	67.3	69.8	72.3	74.8	77.3	79.9	82.4	84.9	
317	11	87.4	89.9	92.4	94.9	97.4	99.9					
317	12							02.4	05.0	07.5	10.0	
318	12	12.5	15.0	17.5	20.0	22.5	25.0	27.5	30.0	32.5	35.0	
319	12	37.5	40.0	42.5	45.0	47.5	50.0	52.4	54.9	57.4	59.9	
320	12	62.4	64.9	67.4	69.9	72.3	74.8	77.3	79.8	82.3	84.8	
321	12	87.2	89.7	92.2	94.7	92.1	99.6					
321	13							02.1	04.6	07.1	09.5	
322	13	12.0	14.5	17.0	19.4	21.9	24.4	26.8	29.3	31.8	34.2	
323	13	36.7	39.2	41.6	44.1	46.6	49.0	51.5	53.9	56.4	58.9	
324	13	61.3	63.8	66.2	68.7	71.1	73.6	76.1	78.5	81.0	83.4	
325	13	85.9	88.3	90.8	93.2	95.7	98.1					
325	14							00.5	03.0	05.4	07.9	

Barometer *H* or h.	N.	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	Parts for each 0.01mm.

326 to 364mm.

Barometer *H* or h.	N.	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	Parts for each 0.01mm.
Milli.	Metr.	Metres.	Metres.	Metres.	Metres.	Metres.	Metres.	Metres.	Metres.	Metres.	Metres.	Metr.
326	14	10.3	12.8	15.2	17.6	20.1	22.5	25.0	27.4	29.8	32.3	1 | 0.2
327	14	34.7	37.2	39.6	42.0	44.5	46.9	49.3	51.7	54.2	56.6	2 | 0.5
328	14	59.0	61.5	63.9	66.3	68.7	71.2	73.6	76.0	78.4	80.9	3 | 0.7
329	14	83.3	85.7	88.1	90.5	92.9	95.4	97.8				4 | 1.0
329	15								00.2	02.6	05.0	5 | 1.2
330	15	07.4	09.9	12.3	14.7	17.1	19.5	21.9	24.3	26.7	29.1	6 | 1.5
331	15	31.5	33.9	36.3	38.7	41.2	43.6	46.0	48.4	50.8	53.2	7 | 1.7
332	15	55.6	58.0	60.4	62.8	65.1	67.5	69.9	72.3	74.7	77.1	8 | 2.0
333	15	79.5	81.9	84.3	86.7	89.1	91.4	93.8	96.2	98.6		9 | 2.2
333	16										01.0	
334	16	03.4	05.8	08.1	10.5	12.9	15.3	17.7	20.0	22.4	24.8	
335	16	27.2	29.6	31.9	34.3	36.7	39.1	41.4	43.8	46.2	48.8	
336	16	50.9	53.3	55.7	58.0	60.4	62.8	65.1	67.5	69.9	72.2	1 | 0.2
337	16	74.6	77.0	79.3	81.7	84.0	86.4	88.8	91.1	93.5	95.8	2 | 0.4
338	16	98.2										3 | 0.7
338	17		00.5	02.9	05.2	07.6	10.0	12.3	14.7	17.0	19.4	4 | 1.0
339	17	21.7	24.1	26.4	28.8	31.1	33.4	35.8	38.1	40.5	42.8	5 | 1.2
340	17	45.2	47.5	49.8	52.2	54.5	56.9	59.2	61.5	63.9	66.2	6 | 1.5
341	17	68.6	70.9	73.2	75.6	77.9	80.2	82.6	84.9	87.2	89.5	7 | 1.7
342	17	91.9	94.2	96.5	98.9							8 | 1.9
342	18					01.2	03.5	05.8	08.2	10.5	12.8	9 | 2.2
343	18	15.1	17.4	19.8	22.1	24.4	26.7	29.0	31.4	33.7	36.0	
344	18	38.3	40.6	42.9	45.2	47.6	49.9	52.2	54.5	56.8	59.1	
345	18	61.4	63.7	66.0	68.3	70.6	73.0	75.3	77.6	79.9	82.2	
346	18	84.5	86.8	89.1	91.4	93.7	96.0	98.3				
346	19								00.6	02.9	05.2	
347	19	07.5	09.6	12.0	14.3	16.6	18.9	21.2	23.5	25.8	28.1	
348	19	30.4	32.7	34.9	37.2	39.5	41.8	44.1	46.4	48.6	50.9	
349	19	53.2	55.5	57.8	60.1	62.3	64.6	66.9	69.2	71.5	73.7	
350	19	76.0	78.3	80.6	82.8	85.1	87.4	89.6	91.9	94.2	96.5	1 | 0.2
351	19	98.7										2 | 0.4
351	20		01.0	03.3	05.5	07.8	10.1	12.3	14.6	16.8	19.1	3 | 0·7
352	20	21.4	23.6	25.9	28.2	30.4	32.7	34.9	37.2	39.5	41.7	4 | 0.9
353	20	44.0	46.2	48.5	50.7	53.0	55.2	57.5	59.7	62.0	64.2	5 | 1.1
354	20	66.5	68.7	71.0	73.2	75.5	77.7	80.0	82.2	84.5	86.7	6 | 1.3
355	20	89.0	91.2	93.4	95.7	97.9						7 | 1.6
355	21						00.2	02.4	04.6	06.9	09.1	8 | 1.8
356	21	11.4	13.6	15.8	18.1	20.3	22.5	24.8	27.0	29.2	31.5	9 | 2.1
357	21	33.7	35.9	38.2	40.4	42.6	44.8	47.1	49.3	51.5	53.7	
358	21	56.0	58.2	60.4	62.6	64.9	67.1	69.3	71.5	73.7	76.0	
359	21	78.2	80.4	82.6	84.8	87.0	89.3	91.5	93.7	95.9	98.1	
360	22	00.3	02.5	04.8	07.0	09.2	11.4	13.6	15.8	18.0	20.2	
361	22	22.4	24.6	26.8	29.0	31.2	33.4	35.6	37.9	40.1	42.3	
362	22	44.5	46.7	48.9	51.0	53.2	55.4	57.6	59.8	62.0	64.2	
363	22	66.4	68.6	70.8	73.0	75.2	77.4	79.6	81.8	83.9	86.1	
364	22	88.3	90.5	92.7	94.9	97.1	99.3					
364	23							01.4	03.6	05.8	08.0	
Barometer *H* or h.	N.	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	Parts for each 0.01mm

365 to 403mm.

Barometer H or h.	N.	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	Parts for each 0.01mm.
Milli.	Metr.	Metres.	Metres.	Metres	Metres.	Metres.	Metres.	Metres.	Metres.	Metres.	Metres.	Metr.
365	23	10.2	12.4	14.5	16.7	18.9	21.1	23.2	25.4	27.6	29.8	1 | 0.2
366	23	32.0	34.1	36.3	38.5	40.7	42.8	45.0	47.2	49.3	51.5	2 | 0.4
367	23	53.7	55.9	58.0	60.2	62.4	64.5	66.7	68.9	71.0	73.2	3 | 0.6
368	23	75.4	77.5	79.7	81.8	84.0	86.2	88.3	90.5	92.6	94.8	4 | 0.9
369	23	97.0	99.1									5 | 1.1
369	24			01.3	03.4	05.6	07.7	09.9	12.1	14.2	16.4	6 | 1.3
370	24	18.5	20.6	22.8	24.9	27.1	29.2	31.4	33.5	35.7	37.8	7 | 1.5
371	24	40.0	42.1	44.3	46.4	48.6	50.7	52.9	55.0	57.2	59.3	8 | 1.7
372	24	61.5	63.6	65.8	67.9	70.1	72.2	74.3	76.5	78.6	80.8	9 | 1.9
373	24	82.9	85.0	87.2	89.3	91.4	93.6	95.7	97.8	99.9		
373	25										02.1	
374	25	04.2	06.3	08.4	10.6	12.7	14.8	16.9	19.0	21.2	23.3	
375	25	25.4	27.5	29.6	31.8	33.9	36.0	38.1	40.2	42.4	44.5	
376	25	46.6	48.7	50.8	53.0	55.1	57.2	59.3	61.4	63.6	65.7	
377	25	67.8	69.9	72.0	74.1	76.2	78.3	80.5	82.6	84.7	86.8	
378	25	88.9	91.0	93.1	95.2	97.3	99.4					
378	26							01.5	03.6	05.7	07.8	
379	26	09.9	12.0	14.1	16.2	18.3	20.4	22.5	24.6	26.7	28.8	
380	26	30.9	33.0	35.1	37.2	39.3	41.3	43.4	45.5	47.6	49.7	
381	26	51.8	53.9	56.0	58.1	60.2	62.2	64.3	66.4	68.5	70.6	
382	26	72.7	74.8	76.9	78.9	81.0	83.1	85.2	87.3	89.3	91.4	
383	26	93.5	95.6	97.7	99.7							
383	27					01.8	03.9	06.0	08.1	10.1	12.2	1 | 0.2
384	27	14.3	16.4	18.4	20 5	22.6	24.6	26.7	28.8	30.9	32.9	2 | 0.4
385	27	35.0	37.1	39.1	41.2	43.2	45.3	47.4	49.4	51.5	53.5	3 | 0.6
386	27	55.6	57.7	59.7	61.8	63.8	65.9	68.0	70.0	72.1	74.1	4 | 0.9
387	27	76.2	78.3	80.3	82.4	84.4	86.5	88.6	90.6	92.7	94.7	5 | 1.1
388	27	96.8	98.8									6 | 1.3
388	28			00.9	02.9	05.0	07.0	09.1	11.1	13.2	15.2	7 | 1.5
389	28	17.3	19.3	21.4	23.4	25.5	27.5	29.6	31.6	33.7	35.7	8 | 1.7
390	28	37.8	39.8	41.9	43.9	46.0	48.0	50.0	52.1	54.1	56.2	9 | 1.9
391	28	58.2	60.2	62.3	64.3	66.3	68.3	70.4	72.4	74.4	76.5	
392	28	78.5	80.5	82.6	84.6	86.6	88.6	90.7	92.7	94.7	96.8	
393	28	98.8										
393	29		00.8	02.8	04.9	06.9	08.9	10.9	12.9	15.0	17.0	
394	29	19.0	21.0	23.0	25.1	27.1	29.1	31.1	33.1	35.2	37.2	
395	29	39.2	41.2	43.2	45.2	47.2	49.2	51.3	53.3	55.3	57.3	
396	29	59.3	61.3	63.3	65.3	67.3	69.3	71.4	73.4	75.4	77.4	
397	29	79.4	81.4	83.4	85.4	87.4	89.4	91.5	93.5	95.5	97.5	
398	29	99.5										
398	30		01.5	03.5	05.5	07.5	09.5	11.5	13.5	15.5	17.5	
399	30	19.5	21.5	23.5	25.5	27.5	29.4	31.4	33.4	35.4	37.4	
400	30	39.4	41.4	43.4	45.4	47.4	49.4	51.3	53.3	55.3	57.3	
401	30	59.3	61.3	63.3	65.2	67.2	69.2	71.2	73.2	75.1	77.1	
402	30	79.1	81.1	83.1	85.0	87.0	89.0	91.0	93.0	94.9	96.9	
403	30	98.9										
Barometer H or h.	N.	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	Parts for each 0.01mm.

403 to 442mm.

Barometer H or h.	N.	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	Parts for each 0.01mm.
Milli.	Metr.	Metres.	Metres.	Metres.	Metres.	Metres	Metres.	Metres.	Metres.	Metres.	Metres.	Metr.
403	31		00.9	02.8	04.8	06.8	08.7	10.7	12.7	14.7	16.6	1 0.2
404	31	18.6	20.6	22.5	24.5	26.5	28.4	30.4	32.4	34.4	36.3	2 0.4
405	31	38.3	40.3	42.2	44.2	46.1	48.1	50.1	52.0	54.0	55.9	3 0.6
406	31	57.9	59.9	61.8	63.8	65.7	67.7	69.7	71.6	73.6	75.5	4 0.8
407	31	77.5	79.5	81.4	83.4	85.3	87.3	89.3	91.2	93.2	95.1	5 1.0
408	31	97.1	99.0									6 1.2
408	32			01.0	02.9	04.9	06.8	08.8	10.7	12.7	14.6	7 1.4
409	32	16.6	18.5	20.5	22.4	24.4	26.3	28.2	30.2	32.1	34.1	8 1.6
410	32	36.0	37.9	39.9	41.8	43.8	45.7	47.6	49.6	51.5	53.5	9 1.8
411	32	55.4	57.3	59.3	61.2	63.2	65.1	67.0	69.0	70.9	72.9	
412	32	74.8	76.7	78.7	80.6	82.5	84.4	86.4	88.3	90.2	92.2	
413	32	94.1	96.0	97.9	99.9							
413	33					01.8	03.7	05.6	07.5	09.5	11.4	
414	33	13.3	15.2	17.1	19.1	21.0	22.9	24.8	26.7	28.7	30.6	
415	33	32.5	34.4	36.3	38.3	40.2	42.1	44.0	45.9	47.9	49.8	
416	33	51.7	53.6	55.5	57.4	59.3	61.2	63.2	65.1	67.0	68.9	
417	33	70.8	72.7	74.6	76.5	78.4	80.3	82.3	84.2	86.1	88.0	
418	33	89.9	91.8	93.7	95.6	97.5	99.4					
418	34							01.3	03.2	05.1	07.0	
419	34	08.9	10.8	12.7	14.6	16.5	18.4	20.3	22.2	24.1	26.0	
420	34	27.9	29.8	31.7	33.6	35.5	37.3	39.2	41.1	43.0	44.9	
421	34	46.8	48.7	50.6	52.5	54.4	56.2	58.1	60.0	61.9	63.8	
422	34	65.7	67.6	69.5	71.4	73.3	75.1	77.0	78.9	80.8	82.7	1 0.2
423	34	84.6	86.5	88.4	90.2	92.1	94.0	95.9	97.8	99.6		2 0.4
423	35										01.5	3 0.6
424	35	03.4	05.3	07.2	09.0	10.9	12.8	14.7	16.6	18.4	20.3	4 0.8
												5 1.0
425	35	22.2	24.1	25.9	27.8	29.6	31.5	33.4	35.2	37.1	38.9	6 1.2
426	35	40.8	42.7	44.5	46.4	48.3	50.1	52.0	53.9	55.8	57.6	7 1.4
427	35	59.5	61.4	63.2	65.1	67.0	68.8	70.7	72.6	74.5	76.3	8 1.6
428	35	78.2	80.1	81.9	83.8	85.6	87.5	89.4	91.2	93.1	94.9	9 1.8
429	35	96.8	98.6									
429	36			00.5	02.3	04.2	06.0	07.9	09.7	11.6	13.4	
430	36	15.3	17.1	19.0	20.8	22.7	24.6	26.4	28.2	30.1	31.9	
431	36	33.8	35.6	37.5	39.3	41.2	43.0	44.8	46.7	48.5	50.4	
432	36	52.2	54.0	55.9	57.7	59.6	61.4	63.2	65.1	66.9	68.8	
433	36	70.6	72.4	74.3	76.1	78.0	79.8	81.6	83.5	85.3	87.2	
434	36	89.0	90.8	92.7	94.5	96.3	98.1					
434	37							00.0	01.8	03.6	05.5	
435	37	07.3	09.1	11.0	12.8	14.6	16.4	18.3	20.1	21.9	23.8	
436	37	25.6	27.4	29.2	31.1	32.9	34.7	36.5	38.3	40.2	42.0	
437	37	43.8	45.6	47.5	49.3	51.1	52.9	54.8	56.6	58.4	60.3	
438	37	62.1	63.9	65.7	67.6	69.4	71.2	73.0	74.8	76.7	78.5	
439	37	80.3	82.1	83.9	85.7	87.5	89.3	91.2	93.0	94.8	96.6	
440	37	98.4										
440	38		00.2	02.0	03.8	05.6	07.5	09.3	11.1	12.9	14.7	
441	38	16.5	18.3	20.1	21.9	23.7	25.5	27.3	29.1	30.9	32.7	
442	38	34.5	36.3	38.1	39.9	41.7	43.5	45.3	47.1	48.9	50.7	
Barometer H or h.	N.	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	Parts for each 0.01mm.

443 to 482mm.

Barometer H or h.	N.	Tenth of Millimetre. 0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	Parts for each 0.01mm.
Milli.	Metr.	Metres.	Metres.	Metres.	Metres.	Metres.	Metres.	Metres.	Metres.	Metres.	Metres.	Metr.
443	38	52.5	54.3	56.1	57.9	59.7	61.4	63.2	65.0	66.8	68.6	
444	38	70.4	72.2	74.0	75.8	77.6	79.3	81.1	82.9	84.7	86.5	
445	38	88.3	90.1	91.9	93.7	95.5	97.2	99.0				
445	39								00.8	02.6	04.4	
446	39	06.2	08.0	09.8	11.5	13.3	15.1	16.9	18.7	20.4	22.2	
447	39	24.0	25.8	27.6	29.3	31.1	32.9	34.7	36.5	38.2	40.0	
448	39	41.8	43.6	45.4	47.1	48.9	50.7	52.5	54.3	56.0	57.8	
449	39	59.6	61.4	63.1	64.9	66.7	68.4	70.2	72.0	73.8	75.5	
450	39	77.3	79.1	80.8	82.6	84.3	86.1	87.9	89.6	91.4	93.1	
451	39	94.9	96.7	98.4								
451	40				00.2	02.0	03.7	05.5	07.3	09.1	10.8	
452	40	12.6	14.4	16.1	17.9	19.6	21.4	23.2	24.9	26.7	28.4	
453	40	30.2	32.0	33.7	35.5	37.2	39.0	40.8	42.5	44.3	46.0	
454	40	47.8	49.5	51.3	53.0	54.8	56.5	58.3	60.0	61.8	63.5	
455	40	65.3	67.0	68.8	70.5	72.3	74.0	75.8	77.5	79.3	81.0	1 0.2
456	40	82.8	84.5	86.3	88.0	89.8	91.5	93.2	95.0	96.7	98.5	2 0.3
457	41	00.2	01.9	03.7	05.4	07.2	08.9	10.6	12.4	14.1	15.9	3 0.5
458	41	17.6	19.3	21.1	22.8	24.6	26.3	28.0	29.8	31.5	33.3	4 0.7
459	41	35.0	36.7	38.5	40.2	41.9	43.6	45.4	47.1	48.8	50.6	5 0.9
460	41	52.3	54.0	55.8	57.5	59.2	60.9	62.7	64.4	66.1	67.9	6 1.0
461	41	69.6	71.3	73.1	74.8	76.5	78.2	80.0	81.7	83.4	85.2	7 1.2
462	41	86.9	88.6	90.3	92.1	93.8	95.5	97.2	98.9			8 1.4
462	42									00.7	02.3	9 1.6
463	42	04.1	05.8	07.5	09.3	11.0	12.7	14.4	16.1	17.9	19.6	
464	42	21.3	23.0	24.7	26.4	28.1	29.8	31.6	33.3	35.0	36.7	
465	42	38.4	40.1	41.8	43.5	45.2	46.9	48.7	50.4	52.1	53.8	
466	42	55.5	57.2	58.9	60.6	62.3	64.0	65.8	67.5	69.2	70.9	
467	42	72.6	74.3	76.0	77.7	79.4	81.1	82.8	84.5	86.2	87.9	
468	42	89.6	91.3	93.0	94.7	96.4	98.1	99.8				
468	43								01.5	03.2	04.9	
469	43	06.6	08.3	10.0	11.7	13.4	15.1	16.8	18.5	20.2	21.9	
470	43	23.6	25.3	27.0	28.7	30.4	32.0	33.7	35.4	37.1	38.8	
471	43	40.5	42.2	43.9	45.6	47.3	48.9	50.6	52.3	54.0	55.7	
472	43	57.4	59.1	60.8	62.5	64.2	65.8	67.5	69.2	70.9	72.6	
473	43	74.3	76.0	77.7	79.3	81.0	82.7	84.4	86.1	87.7	89.4	
474	43	91.1	92.8	94.5	96.1	97.8	99.5					
474	44							01.2	02.9	04.5	06.2	
475	44	07.9	09.6	11.2	12.9	14.6	16.2	17.9	19.6	21.3	22.9	
476	44	24.6	26.3	27.9	29.6	31.3	33.9	35.6	37.3	39.0	40.6	
477	44	41.3	43.0	44.6	46.3	48.0	49.6	51.3	53.0	54.7	56.3	
478	44	58.0	59.7	61.3	63.0	64.7	66.3	68.0	69.7	71.4	73.0	
479	44	74.7	76.4	78.0	79.7	81.3	83.0	84.7	86.3	88.0	89.6	
480	44	91.3	93.0	94.6	96.3	97.9	99.6					
480	45							01.3	02.9	04.6	06.2	
481	45	07.9	09.5	11.2	12.8	14.5	16.1	17.7	19.4	21.0	22.7	
482	45	24.3	25.9	27.6	29.2	30.9	32.5	34.2	35.8	37.5	39.1	

Barometer H or h.	N.	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	Parts for each 0.01mm.

483 to 524mm.

Barometer H or h.	N.	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	Parts for each 0.01mm.
Milli.	Metr.	Metres.	Metres.	Metres.	Metres.	Metres	Metres.	Metres.	Metres.	Metres.	Metres.	Metr.
483	45	40.8	42.4	44.1	45.7	47.4	49.0	50.7	52.3	54.0	55.6	1 | 0.2
484	45	57.3	58.9	60.6	62.2	63.9	65 5	67.1	68.8	70.4	72.1	2 | 0.3
485	45	73.7	75.3	77.0	78.6	80.3	81.9	83.6	85.2	86.9	88.5	3 | 0.5
486	45	90.2	91.8	93.5	95.1	96.8	98.4					4 | 0.6
486	46							00.0	01.7	03.3	05.0	5 | 0.8
487	46	06.6	08.2	09.9	11.5	13.1	14.7	16.4	18.0	19.6	21.3	6 | 1.0
488	46	22.9	24.5	26.2	27.8	29.4	31.0	32.7	34.3	35.9	37.6	7 | 1.1
489	46	39.2	40.8	42.4	44.1	45.7	47.3	48.9	50.5	52.2	53.8	8 | 1.3
490	46	55.4	57.0	58.6	60.3	61.9	63.5	65.1	66.7	68.4	70.0	9 | 1.4
491	46	71.6	73.2	74.9	76.5	78.1	79.7	81.4	83.0	84.6	86.3	
492	46	87.9	89.5	91.1	92.8	94.4	96.0	97.6	99.2			
492	47									00.9	02.5	
493	47	04.1	05.7	07.3	08.9	10.5	12.1	13.8	15.4	17.0	18.6	
494	47	20.2	21.8	23.4	25.0	26.6	28.2	29.9	31.5	33.1	34.7	
495	47	36.3	37.9	39.5	41.1	42.7	44.3	45.9	47.5	49.1	50.7	
496	47	52.3	53.9	55.5	57.1	58.7	60.3	61.9	63.5	65.1	66.7	
497	47	68.3	69.9	71.5	73.1	74.7	76.3	78.0	79.6	81.2	82.8	
498	47	84.4	86.0	87.6	89.2	90.8	92.4	94.0	95.6	97.2	98.8	
499	48	00.4	02.0	03.6	05.2	06.8	08.3	09.9	11.5	13.1	14.7	
500	48	16.3	17.9	19.5	21.1	22.7	24.2	25.8	27.4	89.0	30.6	
501	48	32.2	33.8	35.4	37.0	38.6	40.1	41.7	43.3	44.9	46.5	
502	48	48.1	49.7	51.3	52.9	54.5	56.0	57.6	59.2	60.8	62.4	
503	48	64.0	65.6	67.2	68.7	70.3	71.9	73.5	75.1	76.6	78.2	
504	48	79.8	81.4	83.0	84.5	86.1	87.7	89.3	90.9	92.4	94.0	
505	48	95.6	97.2	98.7								
505	49				00.3	01.9	03.4	05.0	06.6	08.2	09.7	
506	49	11.3	12.9	14.4	16.0	17.6	19.1	20.7	22.3	23.9	25.4	
507	49	27.0	28.6	30.1	31.7	33.3	34.8	36.4	38.0	39.6	41.1	
508	49	42.7	44.3	45.8	47.4	49.0	50.5	52.1	53.7	55.3	56.8	
509	49	58.4	60.0	61.5	63.1	64.6	66.2	67.8	69.3	70.9	72.4	
510	49	74.0	75.6	77.1	78.7	80.2	81.8	83.4	84.9	86.5	88.0	
511	49	89.6	91.2	92.7	94.3	95.8	97.4	99.0				
511	50								00.5	02.1	03.6	
512	50	05.2	06.7	08.3	09.8	11.4	12.9	14.5	16.0	17.6	19.1	
513	50	20.7	22.2	23.8	25.3	26.9	28.4	30.0	31.5	33.1	34.6	
514	50	36.2	37.7	39.3	40.8	42.4	43.9	45.5	46.0	48.6	50.1	
515	50	51.7	53.2	54.8	56.3	57.9	59.4	61.0	62.5	64.1	65.6	
516	50	67.2	68.7	70.3	71.8	73.4	74.9	76.4	78.0	79.5	81.1	
517	50	82.6	84.1	85.7	87.2	88.7	90.2	91.8	93.3	94.8	96.4	
518	50	97.9	99.4									
518	51			01.0	02.5	04.1	05.6	07.1	08.7	10.2	11.8	
519	51	13.3	14.8	16.4	17.9	19.4	20.9	22.5	24.0	25.5	27.1	
520	51	28.6	30.1	31.7	33.2	34.7	36.2	37.8	39.3	40.8	42.4	
521	51	43.9	45.4	47.0	48.5	50.0	51.5	53.1	54.6	56.1	57.7	
522	51	59.2	60.7	62.2	63.8	65.3	66.8	68.3	69.8	71.4	72.9	
523	51	74.4	75.9	77.5	79.0	80.5	82.0	83.6	85.1	86.6	88.2	
524	51	89.7	91.2	92.7	94.3	95.8	97.3	98.8				

Barometer H or h.	N.	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	Parts for each 0.01mm.

524 to 565mm.

Barometer H or h.	N.	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	Parts for each 0.01mm.
Milli.	Metr.	Metres.	Metres.	Metres.	Metres.	Metres	Metres.	Metres.	Metres.	Metres.	Metres.	Metr.
524	52								00.3	01.9	03.4	
525	52	04.9	06.4	07.9	09.4	10.9	12.4	14.0	15.5	17.0	18.5	
526	52	20.0	21.5	23.0	24.5	26.0	27.5	29.1	30.6	32.1	33.6	
527	52	35.1	36.6	38.1	39.6	41.1	42.6	44.2	45.7	47.2	48.7	
528	52	50.2	51.7	53.2	54.7	56.2	57.7	59.3	60.8	62.3	63.8	
529	52	65.3	66.8	68.3	69.8	71.3	72.8	74.3	75.8	77.3	78.8	1 | 0.1
530	52	80.3	81.8	83.3	84.8	86.3	87.8	89.3	90.8	92.3	93.8	2 | 0.3
531	52	95.3	96.8	98.3	99.8							3 | 0.4
531	53					01.3	02.8	04.3	05.8	07.3	08.8	4 | 0.6
532	53	10.3	11.8	13.3	14.8	16.3	17.8	19.3	20.8	22.3	23.8	5 | 0.7
533	53	25.3	26.8	28.3	29.8	31.3	32.7	34.2	35.7	37.2	38.7	6 | 0.9
534	53	40.2	41.7	43.2	44.7	46.2	47.6	49.1	50.6	52.1	53.6	7 | 1.0
535	53	55.1	56.5	58.1	59.6	61.1	62.5	64.0	65.5	67.0	68.5	8 | 1.2
536	53	70.0	71.5	73.0	74.4	75.9	77.4	78.9	80.4	81.8	83.3	9 | 1.3
537	53	84.8	86.3	87.8	89.2	90.7	92.2	93.7	95.2	96.6	98.1	
538	53	99.6										
538	54		01.1	02.6	04.0	05.5	07.0	08.5	10.0	11.4	12.9	
539	54	14.4	15.9	17.4	18.8	20.3	21.8	23.3	24.8	26.2	27.7	
540	54	29.2	30.7	32.1	33.6	35.1	36.5	38.0	39.5	41.0	42.4	
541	54	43.9	45.4	46.8	48.3	49.8	51.2	52.7	54.2	55.7	57.1	
542	54	58.6	60.1	61.5	63.0	64.5	66.0	67.4	68.9	70.4	71.8	
543	54	73.3	74.8	76.2	77.7	79.1	80.6	82.1	83.5	85.0	86.4	
544	54	87.9	89.4	90.8	92.3	93.7	95.2	96.7	98.1	99.6		
544	55										01.0	
545	55	02.5	04.0	05.4	06.9	08.4	09.8	11.3	12.8	14.3	15.7	
546	55	17.2	18.7	20.1	21.6	23.0	24.5	26.0	27.4	28.9	30.3	
547	55	31.8	33.3	34.7	36.1	37.6	39.0	40.5	41.9	43.4	44.8	
548	55	46.3	47.7	49.2	50.6	52.1	53.5	55.0	56.4	57.9	59.3	
549	55	60.8	62.2	63.7	65.1	66.6	68.0	69.5	70.9	72.4	73.8	
550	55	75.3	76.7	78.2	79.6	81.1	82.5	84.0	85.4	86.9	88.3	
551	55	89.8	91.2	92.7	94.1	95.6	97.0	98.4	99.9			
551	56									01.3	02.8	1 | 0.1
552	56	04.2	05.6	07.1	08.5	10.0	11.4	12.8	14.3	15.7	17.2	2 | 0.3
553	56	18.6	20.0	21.5	22.9	24.4	25.8	27.2	28.7	30.1	31.6	3 | 0.4
554	56	33.0	34.4	35.9	37.3	38.8	40.2	41.6	43.1	44.5	46.0	4 | 0.6
555	56	47.4	48.8	50.3	51.7	53.1	54.5	56.0	57.4	58.8	60.3	5 | 0.7
556	56	61.7	63.1	64.6	66.0	67.4	68.8	70.3	71.7	73.1	74.6	6 | 0.9
557	56	76.0	77.4	78.9	80.3	81.7	83.1	84.6	86.0	87.4	88.9	7 | 1.0
558	57	90.3	91.7	93.2	94.6	96.0	97.4	98.9				8 | 1.2
558	57								00.3	01.7	03.2	9 | 1.3
559	57	04.6	06.0	07.4	08.9	10.3	11.7	13.1	14.5	16.0	17.4	
560	57	18.8	20.2	21.6	23.1	24.5	25.9	27.3	28.7	30.2	31.6	
561	57	33.0	34.4	35.8	37.3	38.7	40.1	41.5	42.9	44.4	45.8	
562	57	47.2	48.6	50.0	51.4	52.8	54.2	55.7	57.1	58.5	59.9	
563	57	61.3	62.7	64.1	65.5	66.9	68.3	69.8	71.2	72.6	74.0	
564	57	75.4	76.8	78.2	79.6	81.0	82.4	83.9	85.3	86.7	88.1	
565	57	89.5	90.9	92.4	93.8	95.2	96.6	98.0	99.4			
Barometer H or h	N.	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	Parts for each 0.01mm.

565 to 605mm.

Barometer H or h.	N.	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	Parts for each 0.01mm.
Milli.	Metr.	Metres.	Metres.	Metres.	Metres.	Metres.	Metres.	Metres.	Metres.	Metres.	Metres.	Metr.
565	58									00.8	02.2	
566	58	03.6	05.0	06.4	07.8	09.2	10.6	12.1	13.5	14.9	16.3	
567	58	17.7	19.1	20.5	21.9	23.3	24.7	26.1	27.5	28.9	30.3	
568	58	31.7	33.1	34.5	35.9	37.3	38.7	40.1	41.5	42.9	44.3	
569	58	45.7	47.1	48.5	49.9	51.3	52.7	54.1	55.5	56.9	58.3	
570	58	59.7	61.1	62.5	63.9	65.3	66.7	68.1	69.5	70.9	72.3	
571	58	73.7	75.1	76.5	77.9	79.3	80.6	82.0	83.4	84.8	86.2	
572	58	87.6	89.0	90.4	91.8	93.2	94.5	95.9	97.3	98.7		
572	59										00.1	
573	59	01.5	02.9	04.3	05.7	07.1	08.4	09.8	11.2	12.6	14.0	
574	59	15.4	16.8	18.2	19.6	21.0	22.3	23.7	25.1	26.5	27.9	
575	59	29.3	30.7	32.1	33.4	34.8	36.2	37.6	39.0	40.3	41.7	
576	59	43.1	44.5	45.9	47.2	48.6	50.0	51.4	52.8	54.1	55.5	1 0.1
577	59	56.9	58.3	59.7	61.0	62.4	63.8	65.2	66.6	67.9	69.3	2 0.3
578	59	70.7	72.1	73.5	74.8	76.2	77.6	79.0	80.4	81.7	83.1	3 0.4
579	59	84.5	85.9	87.2	88.6	90.0	91.3	92.7	94.1	95.5	96.8	4 0.5
580	59	98.2	99.6									5 0.7
580	60			00.9	02.3	03.7	05.0	06.4	07.8	09.2	10.5	6 0.8
581	60	11.9	13.3	14.6	16.0	17.4	18.7	20.1	21.5	22.9	24.2	7 1.0
582	60	25.6	27.0	28.3	29.7	31.1	32.4	33.8	35.2	36.6	37.9	8 1.1
583	60	39.3	40.7	42.0	43.4	44.7	46.1	47.5	48.8	50.2	51.5	9 1.2
584	60	52.9	54.3	55.6	57.0	58.4	59.7	61.1	62.5	63.9	65.2	
585	60	66.6	68.0	69.3	70.7	72.0	73.4	74.8	76.1	77.5	78.8	
586	60	80.2	81.6	82.9	84.3	85.6	87.0	88.4	89.7	91.1	92.4	
587	60	93.8	95.1	96.5	97.8	99.2						
587	61						00.5	01.9	03.2	04.6	05.9	
588	61	07.3	08.6	10.0	11.3	12.7	14.0	15.4	16.7	18.1	19.4	
589	61	20.8	22.1	23.5	24.8	26.2	27.5	28.9	30.2	31.6	32.9	
590	61	34.3	35.6	37.0	38.3	39.7	41.0	42.4	43.7	45.1	46.4	
591	61	47.8	49.1	50.5	51.8	53.2	54.5	55.9	57.2	58.6	59.9	
592	61	61.3	62.6	64.0	65.3	66.7	68.0	69.3	70.7	72.0	73.4	
593	61	74.7	76.0	77.4	78.7	80.1	81.4	82.7	84.1	85.4	86.8	
594	61	88.1	89.4	90.8	92.1	93.5	94.8	96.1	97.5	98.8		
594	62										00.2	
595	62	01.5	02.8	04.2	05.5	06.9	08.2	09.5	10.9	12.2	13.6	
596	62	14.9	16.2	17.6	18.9	20.2	21.5	22.9	24.2	25.5	26.9	
597	62	28.2	29.5	30.9	32.2	33.6	34.9	36.2	37.6	38.9	40.3	
598	62	41.6	42.9	44.3	45.6	46.9	48.2	49.6	50.9	52.2	53.6	
599	62	54.9	56.2	57.6	58.9	60.2	61.5	62.9	64.2	65.5	66.9	
600	62	68.2	69.5	70.8	72.2	73.5	74.8	76.1	77.4	78.8	80.1	
601	62	81.4	82.7	84.1	85.4	86.7	88.0	89.4	90.7	92.0	93.4	
602	62	94.7	96.0	97.3	98.7							
602	63					00.0	01.3	02.6	03.9	05.3	06.6	
603	63	07.9	09.2	10.5	11.9	13.2	14.5	15.8	17.1	18.5	19.8	
604	63	21.1	22.4	23.7	25.1	26.4	27.7	29.0	30.3	31.7	33.0	
605	63	34.3	35.6	36.9	38.2	39.5	40.8	42.2	43.5	44.8	46.1	

Barometer H or h.	N.	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	Parts for each 0.01mm.

606 to 647mm.

Barometer H or h.	N.	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	Parts for each 0.01mm.	
Milli.	Metr.	Metres.	Metres.	Metres.	Metres.	Metres.	Metres.	Metres.	Metres.	Metres.	Metres.	Metr.	
606	63	47.4	48.7	50.0	51.3	52.6	53.9	55.3	56.6	57.9	59.2		
607	63	60.5	61.8	63.1	64.5	65.8	67.1	68.4	69.7	71.1	72.4		
608	63	73.7	75.0	76.3	77.6	78.9	80.2	81.5	82.8	84.1	85.4		
609	63	86.7	88.0	89.3	90.6	91.9	93.2	94.6	95.9	97.2	98.5		
610	63	99.8											
610	64		01.1	02.4	03.7	05.0	06 3	07.6	08.9	10.2	11.5		
611	64	12.8	14.1	15.4	16.7	18.0	19.3	20.7	22.0	23.3	24.6		
612	64	25.9	27.2	28.5	29.8	31.1	32.4	33.7	35.0	36.3	37.6		
613	64	38.9	40.2	41.5	42.8	44.1	45.4	46.7	48.0	49.3	50.6		
614	64	51.9	53.2	54.5	55.8	57.1	58.3	59.6	60.9	62.2	63.5		
615	64	64.8	66.1	67.4	68.7	70.0	71.2	72.5	73.8	75.1	76.4		
616	64	77.7	79.0	80.3	81.6	82.9	84.2	85.5	86.8	88.1	89.4		
617	64	90.7	92.0	93.3	94.6	95.9	97.1	98.4	99.7				
617	65									01.0	02.3		
618	65	03.6	04.9	06.2	07.4	08.7	10.0	11.3	12.6	13.8	15.1		
619	65	16.4	17.7	19.0	20.3	21.6	22.8	24.1	25.4	26.7	28.0		
620	65	29.3	30.6	31.9	33.1	34.4	35.7	37.0	38.3	39.5	40.8		
621	65	42.1	43.4	44.7	45.9	47.2	48.5	49.8	51.1	52.3	53.6	1	0.1
622	65	54.9	56.2	57.5	58.7	60.0	61.3	62.6	63.9	65.1	66.4	2	0.2
623	65	67.7	69.0	70.3	71.5	72.8	74.1	75.4	76.7	77.9	79.2	3	0.4
624	65	80.5	81.8	83.0	84.3	85.6	86.8	88.1	89.4	90.7	91.9	4	0.5
												5	0.6
625	65	93.2	94.5	95.8	97.0	98.3	99.6					6	0.8
625	66							00.9	02.2	03.4	04.7	7	0.9
626	66	06.0	07.3	08.5	09.8	11.1	12.3	13.6	14.9	16.2	17.4	8	1.0
627	66	18.7	20.0	21.2	22.5	23.8	25.0	26.3	27.6	28.9	30.1	9	1.1
628	66	31.4	32.7	33.9	36.2	36.4	37.7	39.0	40.2	41.5	42.7		
629	66	44.0	45.3	46.5	47.8	49.1	50.3	51.6	52.9	54.2	55.4		
630	66	56.7	58.0	59.2	60.5	61.7	63.0	64.3	65.5	66.8	68.0		
631	66	69.3	70.6	71.8	73.1	74.4	75.6	76.9	78.2	79.5	80.7		
632	66	82.0	83.2	84.5	85.7	87.0	88.2	89.5	90.7	92.0	93.2		
633	66	94.5	95.8	97.0	98.3	99.5							
633	67						00.8	02.1	03.3	04.6	05.8		
634	67	07.1	08.4	09.6	10.9	12.1	13.4	14.7	15.9	17.2	18.4		
635	67	19.7	20.9	22.2	23.4	24.7	25.9	27.2	28.4	29.7	30.9		
636	67	32.2	33.4	34.7	35.9	37.2	38.4	39.7	40.9	42.2	43.4		
637	67	44.7	45.9	47.2	48.4	49.7	50.9	52.2	53.4	54.7	55.9		
638	67	57.2	58.4	59.7	60.9	62.2	63.4	64.7	65.9	67.2	68.4		
639	67	69.7	70.9	72.2	73.4	74.7	75.9	77.1	78.4	79.6	80.9		
640	67	82.1	83.3	84.6	85.8	87.1	88.3	89.6	90.8	92.1	93.3		
641	67	94.6	95.8	97.1	98.3	99.6							
641	68						00.8	02.0	03.3	04.5	05.8		
642	68	07.0	08.2	09.5	10.7	12.0	13.2	14.4	15.7	16.9	18.2		
643	68	19.4	20.6	21.9	23.1	24.3	25.5	26.8	28.0	29.2	30.5		
644	68	31.7	32.9	34.2	35.4	36.7	37.9	39.1	40.4	41.6	42.9		
645	68	44.1	45.3	46.6	47.8	49.0	50.2	51.5	52.7	53.9	55.2		
646	68	56.4	57.6	58.9	60.1	61.3	62.5	63.8	65.0	66.2	67.5		
647	68	68.7	69.9	71.2	72.4	73.6	74.8	76.1	77.3	78.5	79.8		

Barometer H or h.	N.	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	Parts for each 0.01mm

648 to 689mm.

Barometer H or h.	N.	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	Parts for each 0.01mm.	
Milli.	Metr.	Metres.	Metres.	Metres.	Metres.	Metres.	Metres.	Metres.	Metres.	Metres.	Metres.	Metr.	
648	68	81.0	82.2	83.5	84.7	85.9	87.1	88.4	89.6	90.8	92.1		
649	68	93.3	94.5	95.8	97.0	98.2	99.4						
649	69							00.7	01.9	03.1	04.4		
650	69	05.6	06.8	08.0	09.3	10.5	11.7	12.9	14.1	15.4	16.6		
651	69	17.8	19.0	20.2	21.5	22.7	23.9	25.1	26.3	27.6	28.8		
652	69	30.0	31.2	32.4	33.7	34.9	36.1	37.3	38.5	39.8	41.0		
653	69	42.2	43.4	44.6	45.9	47.1	48.3	49.5	50.7	52.0	53.2		
654	69	54.4	55.6	56.8	58.1	59.3	60.5	61.7	62.9	64.2	65.4		
655	69	66.6	67.8	69.0	70.2	71.4	72.6	73.9	75.1	76.3	77.5		
656	69	78.7	79.9	81.1	82.4	83.6	84.8	86.0	87.2	88.5	89.7		
657	69	90.9	92.1	93.3	94.5	95.7	96.9	98.2	99.4				
657	70									00.6	01.8		
658	70	03.0	04.2	05.4	06.6	07.8	09.0	10.3	11.5	12.7	13.9		
659	70	15.1	16.3	17.5	18.7	19.9	21.1	22.4	23.6	24.8	26.0		
660	70	27.2	28.4	29.6	30.8	32.0	33.2	34.4	35.6	36.8	38.0	1	0.1
661	70	39.2	40.4	41.6	42.8	44.0	45.2	46.4	47.6	48.8	50.0	2	0.2
662	70	51.2	52.4	53.6	54.8	56.0	57.2	58.5	59.7	60.9	62.1	3	0.4
663	70	63.3	64.5	65.7	66.9	68.1	69.3	70.5	71.7	72.9	74.1	4	0.5
664	70	75.3	76.5	77.7	78.9	80.1	81.2	82.4	83.6	84.8	86.0	5	0.6
665	70	87.2	88.4	89.6	90.8	92.0	93.2	94.4	95.6	96.8	98.0	6	0.7
666	70	99.2										7	0.8
666	71		00.4	01.6	02.8	04.0	05.2	06.4	07.6	08.8	10.0	8	1.0
667	71	11.2	12.4	13.6	14.8	16.0	17.1	18.3	19.5	20.7	21.9	9	1.1
668	71	23.1	24.3	25.5	26.7	27.9	29.0	30.2	31.4	32.6	33.8		
669	71	35.0	36.2	37.4	38.6	39.8	40.9	42.1	43.3	44.5	45.7		
670	71	46.9	48.1	49.3	50.5	51.7	52.8	54.0	55.2	56.4	57.6		
671	71	58.8	60.0	61.2	62.3	63.5	64.7	65.9	67.1	68.2	69.4		
672	71	70.6	71.8	73.0	74.2	75.4	76.5	77.7	78.9	80.1	81.3		
673	71	82.5	83.7	84.9	86.0	87.2	88.4	89.6	90.8	91.9	93.1		
674	71	94.3	95.5	96.7	97.8	99.0							
674	72						00.2	01.4	02.6	03.7	04.9		
675	72	06.1	07.3	08.5	09.6	10.8	12.0	13.2	14.4	15.5	16.7		
676	72	17.9	19.1	20.3	21.4	22.6	23.8	25.0	26.2	27.3	28.5		
677	72	29.7	30.9	32.0	33.2	34.4	35.5	36.7	37.9	39.1	40.2		
678	72	41.4	42.6	43.8	44.9	46.1	47.3	48.5	49.7	50.8	52.0		
679	72	53.2	54.4	55.5	56.7	57.9	59.0	60.2	61.4	62.6	63.7		
680	72	64.9	66.1	67.2	68.4	69.6	70.7	71.9	73.1	74.3	75.4		
681	72	76.6	77.8	78.9	80.1	81.3	82.4	83.6	84.8	86.0	87.1	1	0.1
682	72	88.3	89.5	90.6	91.8	93.0	94.1	95.3	96.5	97.7	98.8	2	0.2
683	73	00.0	01.2	02.3	03.5	04.6	05.8	07.0	08.1	09.3	10.4	3	0.3
684	73	11.6	12.8	13.9	15.1	16.2	17.4	18.6	19.7	20.9	22.0	4	0.5
685	73	23.2	24.4	25.5	26.7	27.8	29.0	30.2	31.3	32.5	33.6	5	0.6
686	73	34.8	36.0	37.1	38.3	39.4	40.6	41.8	42.9	44.1	45.2	6	0.7
687	73	46.4	47.6	48.7	49.9	51.0	52.2	53.4	54.5	55.7	56.8	7	0.8
688	73	58.0	59.2	60.3	61.5	62.6	63.8	65.0	66.1	67.3	68.4	8	0.9
689	73	69.6	70.7	71.9	73.0	74.2	75.3	76.5	77.6	78.8	79.9	9	1.1
Barometer H or h	N.	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	Parts for each 0.01mm.	

690 to 730mm.

Barometer H or h.	N.	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	Parts for each 0.01mm.
Milli.	Metr.	Metres.	Metres.	Metres.	Metres.	Metres.	Metres.	Metres.	Metres.	Metres.	Metres.	Metr.
690	73	81.1	82.3	83.4	84.6	85.7	86.9	88.1	89.2	90.4	91.5	
691	73	92.7	93.8	95.0	96.1	97.3	98.4	99.6				
691	74								00.7	01.9	03.0	
692	74	04.2	05.3	06.5	07.6	08.8	09.9	11.1	12.2	13.4	14.5	
693	74	15.7	16.8	18.0	19.1	20.3	21.4	22.6	23.7	24.9	26.0	
694	74	27.2	28.3	29.5	30.6	31.8	32.9	34.1	35.2	36.4	37.5	
695	74	38.7	39.8	41.0	42.1	43.3	44.4	45.5	46.7	47.8	49.0	
696	74	50.1	51.2	52.4	53.5	54.7	55.8	56.9	58.1	59.2	60.4	
697	74	61.5	62.6	63.8	64.9	66.1	67.2	68.3	69.5	70.6	71.8	
698	74	72.9	74.0	75.2	76.3	77.5	78.6	79.7	80.9	82.0	83.2	
699	74	84.3	85.4	86.6	87.7	88.9	90.0	91.1	92.3	93.4	94.6	
700	74	95.7	96.8	98.0	99.1							
700	75					00.3	01.4	02.5	03.7	04.8	06.0	
701	75	07.1	08.2	09.4	10.5	11.6	12.7	13.9	15.0	16.1	17.3	
702	75	18.4	19.5	20.7	21.8	23.0	24.1	25.2	26.4	27.5	28.7	
703	75	29.8	30.9	32.1	33.2	34.3	35.4	36.6	37.7	38.8	40.0	
704	75	41.1	42.2	43.4	44.5	45.6	46.7	47.9	49.0	50.1	51.3	
705	75	52.4	53.5	54.7	55.8	56.9	58.0	59.2	60.3	61.4	62.6	
706	75	63.7	64.8	66.0	67.1	68.2	69.3	70.5	71.6	72.7	73.9	
707	75	75.0	76.1	77.2	78.4	79.5	80.6	81.7	82.8	84.0	85.1	
708	75	86.2	87.3	88.5	89.6	90.7	91.8	93.0	94.1	95.2	96.4	
709	75	97.5	98.6	99.7								
709	76				00.9	02.0	03.1	04.2	05.3	06.5	07.6	
710	76	08.7	09.8	10.9	12.1	13.2	14.3	15.4	16.5	17.7	18.8	
711	76	19.9	21.0	22.1	23.3	24.4	25.5	26.6	27.7	28.9	30.0	
712	76	31.1	32.2	33.3	34.4	35.5	36.6	37.8	38.9	40.0	41.1	1 0.1
713	76	42.2	43.3	44.4	45.6	46.7	47.8	48.9	50.0	51.2	52.3	2 0.2
714	76	53.4	54.5	55.6	56.8	57.9	59.0	60.1	61.2	62.4	63.5	3 0.3
715	76	64.6	65.7	66.8	67.9	69.0	70.1	71.3	72.4	73.5	74.6	4 0.4
716	76	75.7	76.8	77.9	79.0	80.1	81.2	82.4	83.5	84.6	85.7	5 0.5
717	76	86.8	87.9	89.0	90.1	91.2	92.3	93.5	94.6	95.7	96.8	6 0.7
718	76	97.9	99.0									7 0.8
718	77			00.1	01.2	02.3	03.4	04.6	05.7	06.8	07.9	8 0.9
719	77	09.0	10.1	11.2	12.3	13.4	14.5	15.7	16.8	17.9	19.0	9 1.0
720	77	20.1	21.2	22.3	23.4	24.5	25.6	26.7	27.8	28.9	30.0	
721	77	31.1	32.2	33.3	34.4	35.5	36.6	37.7	38.8	39.9	41.0	
722	77	42.1	43.2	44.3	45.4	46.5	47.6	48.7	49.8	50.9	52.0	
723	77	53.1	54.2	55.3	56.4	57.5	58.6	59.8	60.9	62.0	63.1	
724	77	64.2	65.3	66.4	67.5	68.6	69.6	70.7	71.8	72.9	74.0	
725	77	75.1	76.2	77.3	78.4	79.5	80.6	81.7	82.8	83.9	85.0	
726	77	86.1	87.2	88.3	89.4	90.5	91.6	92.7	93.8	94.9	96.0	
727	77	97.1	98.2	99.3								
727	78				00.4	01.5	02.5	03.6	04.7	05.8	06.9	
728	78	08.0	09.1	10.2	11.3	12.4	13.5	14.6	15.7	16.8	17.9	
729	78	19.0	20.1	21.2	22.3	23.4	24.4	25.5	26.6	27.7	28.8	
730	78	29.9	31.0	32.1	33.3	34.3	35.3	36.4	37.5	38.6	39.7	

Barometer H or h.	N.	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	Parts for each 0.01mm.

731 to 770mm.

Barometer H or h.	N.	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	Parts for each 0.01mm.
Milli.	Metr.	Metres.	Metres.	Metres.	Metres.	Metres.	Metres.	Metres.	Metres.	Metres.	Metres.	Metr.
731	78	40.8	41.9	43.0	44.1	45.2	46.2	47.3	48.4	49.5	50.6	
732	78	51.7	52.8	53.9	54.9	56.0	57.0	58.2	59.3	60.3	61.4	
733	78	62.5	63.6	64.7	65.8	66.9	67.9	69.0	70.1	71.2	72.3	
734	78	73.4	74.5	75.6	76.6	77.7	78.8	79.9	81.0	82.0	83.1	
735	78	84.2	85.3	86.4	87.5	88.6	89.6	90.7	91.8	92.9	94.0	
736	78	95.1	96.2	97.3	98.3	99.4						
736	79						00.5	01.6	02.7	03.7	04.8	
737	79	05.9	07.0	08.1	09.1	10.2	11.3	12.4	13.5	14.5	15.6	
738	79	16.7	17.8	18.9	19.9	21.0	22.1	23.2	24.3	25.3	26.4	
739	79	27.5	28.6	29.6	30.7	31.8	32.8	33.9	35.0	36.1	37.1	
740	79	38.2	39.3	40.4	41.4	42.5	43.6	44.7	45.8	46.8	47.9	
741	79	49.0	50.1	51.1	52.2	53.3	54.3	55.4	56.5	57.6	58.6	
742	79	59.7	60.8	61.8	62.9	64.0	65.0	66.1	67.2	68.3	69.3	
743	79	70.4	71.5	72.6	73.6	74.7	75.8	76.9	78.0	79.0	80.1	
744	79	81.2	82.3	83.3	84.4	85.5	86.5	87.6	88.7	89.8	90.8	
745	79	91.9	93.0	94.0	95.1	96.1	97.2	98.3	99.3			
745	80									00.4	01.4	
746	80	02.5	03.6	04.6	05.7	06.8	07.8	08.9	10.0	11.1	12.3	
747	80	13.2	14.3	15.3	16.4	17.4	18.5	19.6	20.6	21.7	22.7	
748	80	23.8	24.9	25.9	27.0	28.0	29.1	30.2	31.2	32.3	33.3	
749	80	34.4	35.5	36.5	37.6	38.7	39.7	40.8	41.9	43.0	44.0	
750	80	45.1	46.2	47.3	48.4	49.4	50.5	51.6	52.6	53.7	54.7	
751	80	55.7	56.8	57.8	58.9	59.9	61.0	62.1	63.1	64.2	65.2	
752	80	66.3	67.4	68.4	69.5	70.5	71.6	72.7	73.7	74.8	75.8	
753	80	76.9	78.0	79.0	80.1	81.1	82.2	83.3	84.3	85.4	86.4	
754	80	87.5	88.5	89.6	90.6	91.7	92.7	93.8	94.8	95.9	96.9	1 | 0.1
755	80	98.0	99.1									2 | 0.2
755	81			00.1	01.2	02.2	03.3	04.4	05.4	06.5	07.5	3 | 0.3
756	81	08.6	09.6	10.7	11.7	12.8	13.8	14.9	15.9	17.0	18.0	4 | 0.4
757	81	19.1	20.1	21.2	22.2	23.3	24.3	25.4	26.4	27.5	28.5	5 | 0.5
758	81	29.6	30.6	31.7	32.7	33.8	34.8	35.9	36.9	38.0	39.0	6 | 0.6
759	81	40.1	41.1	42.2	43.2	44.3	45.3	46.4	47.4	48.5	49.5	7 | 0.7
												8 | 0.8
760	81	50.6	51.6	52.7	53.7	54.8	55.8	56.9	57.9	59.0	60.0	9 | 0.9
761	81	61.1	62.1	63.2	64.2	65.3	66.3	67.3	68.4	69.4	70.5	
762	81	71.5	72.5	73.6	74.6	75.7	76.7	77.8	78.8	79.9	80.9	
763	81	82.0	83.0	84.1	85.1	86.2	87.2	88.2	89.3	90.3	91.4	
764	81	92.4	93.4	94.5	95.5	96.6	97.6	98.6	99.7			
764	82									00.7	01.8	
765	82	02.8	03.8	04.9	05.9	07.0	08.0	09.0	10.1	11.1	12.2	
766	82	13.2	14.2	15.3	16.3	17.4	18.4	19.4	20.5	21.5	22.6	
767	82	23.6	24.6	25.7	26.7	27.8	28.8	29.8	30.9	31.9	33.0	
768	82	34.0	35.0	36.1	37.1	38.2	39.2	40.2	41.3	42.3	43.4	
769	82	44.4	45.4	46.5	47.5	48.5	49.5	50.6	51.6	52.6	53.7	
770	82	54.7	55.7	56.8	57.8	58.8	59.8	60.9	61.9	62.9	64.0	
Barometer H or h.	N.	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	Parts for each 0.01mm.

771 to 810mm.

Barometer H or h.	N.	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	Parts for each 0.01mm.	
Milli.	Metr.	Metres.	Metres.	Metres.	Metres.	Metres.	Metres.	Metres.	Metres.	Metres.	Metres.		Metr.
771	82	65.0	66.0	67.1	68.1	69.2	70.2	71.2	72.3	73.3	74.4		
772	82	75.4	76.4	77.5	78.5	79.5	80.5	81.6	82.6	83.6	84.7		
773	82	85.7	86.7	87.8	88.8	89.8	90.8	91.9	92.9	93.9	95.0		
774	82	96.0	97.0	98.0	99.1								
774	83					00.1	01.1	02.1	03.1	04.2	05.2		
775	83	06.2	07.2	08.3	09.3	10.3	11.3	12.4	13.4	14.4	15.5		
776	83	16.5	17.5	18.5	19.6	20.6	21.6	22.6	23.6	24.7	25.7		
777	83	26.7	27.7	28.8	29.8	30.8	31.8	32.9	33.9	34.9	36.0		
778	83	37.0	38.0	39.0	40.1	41.1	42.1	43.1	44.1	45.2	46.2		
779	83	47.2	48.2	49.2	50.3	51.3	52.3	53.3	54.3	55.4	56.4		
780	83	57.4	58.4	59.4	60.5	61.5	62.5	63.5	64.5	65.6	66.6		
781	83	67.6	68.6	69.6	70.7	71.7	72.7	73.7	74.7	75.8	76.8		
782	83	77.8	78.8	79.8	80.9	81.9	82.9	83.9	84.9	86.0	87.0		
783	83	88.0	89.0	90.0	91.1	92.1	93.1	94.1	95.1	96.2	97.2		
784	83	98.2	99.2										
784	84			00.2	01.2	02.2	03.2	04.3	05.3	06.3	07.3		
785	84	08.3	09.3	10.3	11.4	12.4	13.4	14.4	15.4	16.5	17.5		
786	84	18.5	19.5	20.5	21.5	22.5	23.5	24.6	25.6	26.6	27.6		
787	84	28.6	29.6	30.6	31.6	32.6	33.6	34.7	35.7	36.7	37.7		
788	84	38.7	39.7	40.7	41.7	42.7	43.7	44.8	45.8	46.8	47.8		
789	84	48.8	49.8	50.8	51.8	52.8	53.8	54.9	55.9	56.9	57.9		
790	84	58.9	59.9	60.9	61.9	62.9	63.9	65.0	66.0	67.0	68.0		
791	84	68.9	69.9	70.9	71.9	72.9	73.9	75.0	76.0	77.0	78.0	1	0.1
792	84	79.0	80.0	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	2	0.2
793	84	89.0	90.0	91.0	92.0	93.0	94.0	95.1	96.1	97.1	98.1	3	0.3
794	84	99.1										4	0.4
794	85		00.1	01.1	02.1	03.1	04.1	05.1	06.1	07.1	08.1	5	0.5
795	85	09.1	10.1	11.1	12.1	13.1	14.1	15.1	16.1	17.1	18.1	6	0.6
796	85	19.1	20.1	21.1	22.1	23.1	24.1	25.1	26.1	27.1	28.1	7	0.7
797	85	29.1	30.1	31.1	32.1	33.1	34.1	35.1	36.1	37.1	38.1	8	0.8
798	85	39.1	40.1	41.1	42.1	43.1	44.1	45.1	46.1	47.1	48.1	9	0.9
799	85	49.1	50.1	51.1	52.0	53.0	54.1	55.0	56.0	57.0	58.0		
800	85	59.0	60.0	61.0	62.0	63.0	64.0	65.0	66.0	67.0	68.0		
801	85	69.0	70.0	70.9	71.9	72.9	73.9	74.9	75.9	76.9	77.9		
802	85	78.9	79.9	80.9	81.9	82.9	83.9	84.9	85.8	86.8	87.8		
803	85	88.8	89.8	90.8	91.8	92.8	93.8	94.8	95.8	96.7	97.7		
804	85	98.7	99.7										
804	86			00.7	01.7	02.7	03.7	04.7	05.7	06.6	07.6		
805	86	08.6	09.6	10.6	11.6	12.6	13.6	14.6	15.5	16.5	17.5		
806	86	18.5	19.5	20.5	21.5	22.5	23.4	24.4	25.4	26.4	27.4		
807	86	28.4	29.4	30.4	31.3	32.3	33.3	34.3	35.3	36.3	37.3		
808	86	38.3	39.2	40.2	41.2	42.2	43.2	44.2	45.1	46.1	47.1		
809	86	48.1	49.1	50.1	51.1	52.0	53.0	54.0	55.0	56.0	57.0		
810	86	57.9	58.9	59.9	60.9	61.9	62.8	63.8	64.8	65.8	66.8		
Barometer H or h.	N.	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	Parts for each 0.01mm.	

TABLE II. Correction for Difference of Temperature of Attached Thermometers.

Temperature of Barometers at Station { Upper = T′ / Lower = T.

T′ — T Centig.	Correct. Metres.	T′ — T Centigrade.	Correct. Metres.	T′ — T Centigrade.	Correct. Metres.	T′ — T Centigrade.	Correct. Metres.	T′ — T Centigrade.	Correct. Metres.
0.0	0.0	8.0	10.3	16.0	20.6	24.0	30.9	32.0	41.3
0.2	0.3	8.2	10.6	16.2	20.9	24.2	31.2	32.2	41.5
0.4	0.5	8.4	10.8	16.4	21.1	24.4	31.5	32.4	41.8
0.6	0.8	8.6	11.1	16.6	21.4	24.6	31.7	32.6	42.0
0.8	1.0	8.8	11.3	16.8	21.7	24.8	32.0	32.8	42.3
1.0	1.3	9.0	11.6	17.0	21.9	25.0	32.2	33.0	42.5
1.2	1.5	9.2	11.9	17.2	22.2	25.2	32.5	33.2	42.8
1.4	1.8	9.4	12.1	17.4	22.4	25.4	32.7	33.4	43.1
1.6	2.1	9.6	12.4	17.6	22.7	25.6	33.0	33.6	43.3
1.8	2.3	9.8	12.6	17.8	22.9	25.8	33.3	33.8	43.6
2.0	2.6	10.0	12.9	18.0	23.2	26.0	33.5	34.0	43.8
2.2	2.8	10.2	13.1	18.2	23.5	26.2	33.8	34.2	44.1
2.4	3.1	10.4	13.4	18.4	23.7	26.4	34.0	34.4	44.3
2.6	3.4	10.6	13.7	18.6	24.0	26.6	34.3	34.6	44.6
2.8	3.6	10.8	13.9	18.8	24.2	26.8	34.6	34.8	44.9
3.0	3.9	11.0	14.2	19.0	24.5	27.0	34.8	35.0	45.1
3.2	4.1	11.2	14.5	19.2	24.8	27.2	35.1	35.2	45.4
3.4	4.4	11.4	14.7	19.4	25.0	27.4	35.3	35.4	45.6
3.6	4.6	11.6	15.0	19.6	25.3	27.6	35.6	35.6	45.9
3.8	4.9	11.8	15.2	19.8	25.5	27.8	35.8	35.8	46.2
4.0	5.2	12.0	15.5	20.0	25.8	28.0	36.1	36.0	46.4
4.2	5.4	12.2	15.8	20.2	26.0	28.2	36.4	36.2	46.7
4.4	5.7	12.4	16.0	20.4	26.3	28.4	36.6	36.4	46.9
4.6	5.9	12.6	16.3	20.6	26.6	28.6	36.9	36.6	47.2
4.8	6.2	12.8	16.5	20.8	26.8	28.8	37.1	36.8	47.4
5.0	6.4	13.0	16.8	21.0	27.1	29.0	37.4	37.0	47.7
5.2	6.7	13.2	17.0	21.2	27.3	29.2	37.6	37.2	48.0
5.4	7.0	13.4	17.3	21.4	27.6	29.4	37.9	37.4	48.2
5.6	7.2	13.6	17.5	21.6	27.8	29.6	38.2	37.6	48.5
5.8	7.5	13.8	17.8	21.8	28.1	29.8	38.4	37.8	48.7
6.0	7.7	14.0	18.0	22.0	28.4	30.0	38.7	38.0	49.0
6.2	8.0	14.2	18.3	22.2	28.6	30.2	38.9	38.2	49.2
6.4	8.3	14.4	18.5	22.4	28.9	30.4	39.2	38.4	49.5
6.6	8.5	14.6	18.8	22.6	29.1	30.6	39.5	38.6	49.8
6.8	8.8	14.8	19.0	22.8	29.4	30.8	39.7	38.8	50.0
7.0	9.0	15.0	19.3	23.0	29.7	31.0	40.0	39.0	50.3
7.2	9.3	15.2	19.6	23.2	29.9	31.2	40.2	39.2	50.5
7.4	9.5	15.4	19.8	23.4	30.2	31.4	40.5	39.4	50.8
7.6	9.8	15.6	20.1	23.6	30.4	31.6	40.7	39.6	51.1
7.8	10.1	15.8	20.3	23.8	30.7	31.8	41.0	39.8	51.3
8.0	10.3	16.0	20.6	24.0	30.9	32.0	41.3	40.0	51 6

This Table supposes the scale to be of *brass* from the top to the cistern. If it were of glass or of wood, the argument T′ — T ought to be diminished at the ratio of 54 to 62.

In calculating the formula of Laplace, we begin by reducing the barometers to the same temperature by means of the following formula: $H = h' + h'\left(\frac{T' - T}{6196}\right)$. Table II. saves this trouble, and gives, in metres, the correction due to the difference of temperature of the barometers. The formula adopted is,

$$\text{Log. } (a + ax) = \text{Log. } a + x - \tfrac{1}{2}x^2 + \tfrac{1}{3}x^3 \ldots).$$

Substituting in this formula h instead of a, subtracting Log. h from each number, we have,

$$\text{Log. } (h + h.x) - \text{Log. } h = \text{Log. } (h) - \text{Log. } (h) + x - \tfrac{1}{2}x^2 + \tfrac{1}{3}x^3 - \text{\&c.}$$

Striking Log. (h) out of the second member, and the terms $\frac{1}{2}x^2 \frac{1}{3}x^3 \ldots$, which are without influence, we have Log. $(h + hx) - \text{Log. } h = x$; Replacing x by its value $= \left(\frac{T' - T}{6196}\right)$, and multiplying by M and by 6196, the general barometrical coefficient, we have finally for the value in metres of the correction due to $(T' - T)$

$$\frac{M}{6196}(T' - T)\,18336 = \left(\frac{0.4342945}{6196}\right)18336\,(T' - T).$$

TABLE III. Correction for Decrease of Gravitation in Latitude.

$$\beta = (0.0028371 \text{ cosin. } 2\,L). \quad (A + \alpha + \beta).$$

The Argument is the Mean Latitude between the two Stations.

LATITUDE.		Correction, in metres, for								
Correction. Added.	Subtr'ct	1000	2000	3000	4000	5000	6000	7000	8000	9000
°	°									
0	90	2.8	5.7	8.5	11.3	14.2	17.0	19.9	22.7	25.7
1	89	2.8	5.7	8.5	11.3	14.2	17.0	19.8	22.7	25.6
2	88	2.8	5.7	8.5	11.3	14.1	17.0	19.8	22.6	25.5
3	87	2.8	5.6	8.5	11.3	14.1	16.9	19.7	22.6	25.4
4	86	2.8	5.6	8.4	11.2	14.0	16.9	19.7	22.5	25.3
5	85	2.8	5.6	8.4	11.2	14.0	16.8	19.6	22.3	25.1
6	84	2.8	5.5	8.3	11.1	13.9	16.6	19.4	22.2	25.0
7	83	2.7	5.5	8.2	11.0	13.8	16.5	19.3	22.0	24.8
8	82	2.7	5.4	8.2	10.9	13.6	16.4	19.1	21.8	24.5
9	81	2.7	5.4	8.1	10.8	13.5	16.2	18.9	21.6	24.3
10	80	2.7	5.3	8.0	10.7	13.3	16.0	18.7	21.3	24.0
11	79	2.6	5.2	7.9	10.5	13.1	15.8	18.4	21.0	23.7
12	78	2.6	5.2	7.8	10.4	13.0	15.5	18.1	20.7	23.3
13	77	2.5	5.1	7.6	10.2	12.7	15.3	17.8	20.4	22.9
14	76	2.5	5.0	7.5	10.0	12.5	15.0	17.5	20.0	22.5
15	75	2.5	4.9	7.4	9.8	12.3	14.7	17.2	19.7	22.1
16	74	2.4	4.8	7.2	9.6	12.0	14.4	16.8	19.2	21.6
17	73	2.4	4.7	7.0	9.4	11.8	14.1	16.5	18.8	21.2
18	72	2.3	4.6	6.9	9.2	11.5	13.8	16.1	18.4	20.7
19	71	2.2	4.5	6.7	8.9	11.2	13.4	15.6	17.9	20.1
20	70	2.2	4.3	6.5	8.7	10.9	13.0	15.2	17.4	19.6
21	69	2.1	4.2	6.3	8.4	10.5	12.6	14.7	16.9	19.0
22	68	2.0	4.1	6.1	8.2	10.2	12.2	14.3	16.3	18.4
23	67	2.0	3.9	5.9	7.9	9.8	11.8	13.8	15.8	17.7
24	66	1.9	3.8	5.7	7.6	9.5	11.4	13.3	15.2	17.1
25	65	1.8	3.6	5.5	7.3	9.1	10.9	12.8	14.6	16.4
26	64	1.7	3.5	5.2	7.0	8.7	10.5	12.2	14.0	15.7
27	63	1.7	3.3	5.0	6.7	8.3	10.0	11.7	13.3	15.0
28	62	1.6	3.2	4.8	6.3	7.9	9.5	11.1	12.7	14.3
29	61	1.5	3.0	4.5	6.0	7.5	9.0	10.5	12.0	13.5
30	60	1.4	2.8	4.3	5.7	7.1	8.5	9.9	11.3	12.8
31	59	1.3	2.7	4.0	5.3	6.6	8.0	9.3	10.6	12.0
32	58	1.2	2.5	3.7	5.0	6.2	7.5	8.7	9.9	11.2
33	57	1.1	2.3	3.5	4.6	5.8	6.9	8.1	9.2	10.4
34	56	1.1	2.1	3.2	4.2	5.3	6.4	7.4	8.5	9.6
35	55	1.0	1.9	2.9	3.9	4.8	5.8	6.8	7.8	8.7
36	54	0.9	1.7	2.6	3.5	4.4	5.3	6.1	7.0	7.9
37	53	0.8	1.6	2.3	3.1	3.9	4.7	5.5	6.2	7.0
38	52	0.7	1.4	2.1	2.7	3.4	4.1	4.8	5.5	6.2
39	51	0.6	1.2	1.8	2.4	2.9	3.5	4.1	4.7	5.3
40	50	0.5	1.0	1.5	2.0	2.5	3.0	3.4	3.9	4.4
41	49	0.4	0.8	1.2	1.6	2.0	2.4	2.8	3.2	3.5
42	48	0.3	0.6	0.9	1.2	1.5	1.8	2.1	2.4	2.7
43	47	0.2	0.4	0.6	0.8	1.0	1.2	1.4	1.6	1.8
44	46	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9
45	45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TABLE IV. Correction for Decrease of Gravitation in the Vertical Line.

$$\delta = \left(\frac{A + \alpha + \beta + \upsilon + 15296}{6366200}\right) \times A\ (+\alpha + \beta + \upsilon).$$

Argument $= (A + \alpha + \beta + \upsilon)$.

Approximate Difference of Level.	Correspond. Correction Positive.	Approximate Difference of Level.	Correspond. Correction Positive.	Approximate Difference of Level.	Correspond. Correction Positive.	Approximate Difference of Level.	Correspond. Correction Positive.
Metres.	Metres.	Metres.	Metres.	Metres.	Metres.	Metres.	Metres.
100	0.2	2100	6.0	4100	12.9	6100	21.1
200	0.5	2200	6.3	4200	13.3	6200	21.6
300	0.8	2300	6.6	4300	13.7	6300	22.0
400	1.0	2400	6.9	4400	14.1	6400	22.5
500	1.3	2500	7.3	4500	14.5	6500	22.9
600	1.6	2600	7.6	4600	14.9	6600	23.4
700	1.8	2700	7.9	4700	15.3	6700	23.9
800	2.1	2800	8.3	4800	15.7	6800	24.3
900	2.4	2900	8.6	4900	16.1	6900	24.8
1000	2.7	3000	8.9	5000	16.5	7000	25.3
1100	2.9	3100	9.3	5100	16.9	7100	25.7
1200	3.2	3200	9.6	5200	17.3	7200	26.2
1300	3.5	3300	10.0	5300	17.7	7300	26.7
1400	3.8	3400	10.3	5400	18.1	7400	27.2
1500	4.1	3500	10.7	5500	18.5	7500	27.7
1600	4.4	3600	11.1	5600	19.0	7600	28.1
1700	4.7	3700	11.4	5700	19.4	7700	28.6
1800	5.0	3800	11.8	5800	19.8	7800	29.1
1900	5.3	3900	12.2	5900	20.3	7900	29.6
2000	5.6	4000	12.5	6000	20.7	8000	30.1

TABLE V. Correction for the Elevation of the Lower Station above Ocean.

Argument = Height of Barometer at Lower Station.

Approximate Difference of Level.	Height of Barometer at Lower Station in Millimetres.							
	400	450	500	550	600	650	700	750
Metres.	Metres.	Metres.	Metres.	Metres.	Metres.	Metres.	Metres.	Metres.
1000	1.7	1.4	1.1	0.9	0.6	0.4	0.2	0.0
2000	3.4	2.8	2.2	1.7	1.3	0.8	0.4	0.1
3000	5.1	4.2	3.3	2.6	1.9	1.3	0.7	0.1
4000	6.8	5.6	4.4	3.4	2.5	1.7	0.9	0.1
5000	8.5	6.9	5.5	4.3	3.1	2.1	1.1	0.1
6000	10.3	8.3	6.7	5.2	3.8	2.5	1.3	0.2
7000	12.0	9.7	7.8	6.0	4.4	2.9	1.5	0.2
8000	13.7	11.1	8.9	6.9	5.0	3.4	1.8	0.2
9000	15.4	12.5	10.0	7.7	5.7	3.8	2.0	0.3

THERMOMETRICAL MEASUREMENTS OF HEIGHTS.

TO DEDUCE DIFFERENCES OF LEVEL FROM THE TEMPERATURE OF THE BOILING POINT OF WATER.

When water is heated in the open air, the elastic force of the vapors produced from it gradually increases, until it becomes equal to the incumbent weight of the atmosphere. Then, the pressure of the atmosphere being overcome, the steam escapes rapidly in large bubbles, and the water boils. The temperature at which, in the open air, water boils thus depends upon the weight of the atmospheric column above it, and under a less barometric pressure the water will boil at a lower temperature than under a greater pressure. Now as the weight of the atmosphere decreases with the elevation, it is obvious that in ascending a mountain the *higher* the station where an observation is taken the *lower* the temperature will be at which water boils at that station. Therefore for measuring the heights it is only necessary to find the barometric pressures which correspond to the various temperatures of boiling water.

The barometric pressure at the lower and at the upper station being known, the difference of altitude may be found by the usual formula, or by the tables for the calculation of heights from barometrical observations.

From the above it may be seen that the heights determined by means of the temperature of boiling water are less reliable than those deduced from barometrical observations. Both derive the difference of altitude from the difference of atmospheric pressure. But the temperature of boiling water gives only *indirectly* the atmospheric pressure, which is given *directly* by the barometer. This method is thus liable to all the chances of error which may affect the measurements by means of the barometer, and besides it adds to them new ones peculiar to itself, the principal of which, not to speak of the differences exhibited in the various tables of the force of vapor, is the difficulty of ascertaining with the necessary accuracy the true temperature of boiling water. In the present state of thermometry it would be hardly safe, indeed, to answer, in the most favorable circumstances, for quantities so small as hundredths of degrees, even when the thermometer has been constructed with the utmost care; moreover the quality of the glass of the instrument, the form and the substance of the vessel containing the water, the nature of the water itself, the place at which the bulb of the thermometer is placed, whether in the current of steam or in the water, all these circumstances cause no inconsiderable variations to take place in the indications of thermometers observed under the same atmospheric pressure.

Owing to these various causes, an observation of the boiling point, differing by one tenth of a degree from the true temperature, ought to be still admitted as a good one. Now, as the tables show, an error of one tenth of a degree Centigrade in the temperature of boiling water would cause an error of 2 millimetres in the barometric pressure, or of from 70 to 80 feet in the final result, while with a good barometer the error of pressure will hardly ever exceed one tenth of a millimetre, making a difference of 3 feet in altitude.

Notwithstanding these imperfections, the hypsometric thermometer, or thermometrical barometer, is of the greatest utility to travellers traversing distant or rough countries, on account of its being more conveniently transported and much less liable to accidents than the mercurial barometer. The best form for it is that contrived and described by Regnault in the *Annales de Chimie et Physique*, T. XIV. p. 202. It consists of an accurate thermometer with long degrees, subdivided into tenths, whose bulb is placed, about 2 or 3 centimetres above the surface of the water, in the steam arising from distilled water in a cylindrical vessel, the water being made to boil by a spirit lamp. The whole instrument when closed is about 6 inches long; when drawn out for observation, about 14 inches.

The following table of barometric pressures, corresponding to temperatures of boiling water, has been calculated by Regnault from his Tables of Forces of Vapor, and published in the *Annales de Physique et de Chimie*, T. XIV. p. 206. It gives, in millimetres of mercury, the barometric pressures corresponding to every hundredth of a Centigrade degree from 85° C = 433 millimetres to 102° C = 790 millimetres.

The accuracy of this table has been tested by direct observation by Mr. Wisse, a traveller competent in such matters, who noted down simultaneously the temperatures of the boiling point of water and the height of the barometer, in various parts of the Andes, up to the summit of the volcano of Pichincha, including in his observations barometrical pressures ranging from 752 to 430 millimetres of mercury. The agreement between the barometric pressures given here by Regnault and those found by Wisse are very satisfactory, the differences never exceeding a few tenths of a millimetre. See *Annales de Chimie et de Physique*, T. XXVIII. p. 123.

Centig. Degrees.	Hundredths of a Degree.									
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**
°	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.
85.0	433.04	433.21	433.38	433.55	433.72	433.89	434.07	434.24	434.41	434.58
85.1	434.75	434.92	435.09	435.26	435.43	435.60	435.78	435.95	436.12	436.29
85.2	436.46	436.63	436.80	436.97	437.14	437.31	437.49	437.66	437.83	438.00
85.3	438.17	438.34	438.51	438.69	438.86	439.03	439.20	439.37	439.55	439.72
85.4	439.89	440.06	440.23	440.41	440.58	440.75	440.93	441.10	441.27	441.45
85.5	441.62	441.79	441.97	442.14	442.31	442.48	442.66	442.83	443.00	443.18
85.6	443.35	443.52	443.70	443.87	444.05	444.22	444.39	444.57	444.74	444.92
85.7	445.09	445.26	445.44	445.61	445.79	445.96	446.14	446.31	446.49	446.67
85.8	446.84	447.01	447.19	447.36	447.54	447.71	447.89	448.06	448.24	448.41
85.9	448.59	448.76	448.94	449.11	449.29	449.46	449.64	449.81	449.99	450.16
86.0	450.34	450.52	450.69	450.87	451.04	451.22	451.40	451.57	451.75	451.92
86.1	452.10	452.28	452.45	452.63	452.81	452.98	453.16	453.34	453.52	453.69
86.2	453.87	454.05	454.22	454.40	454.58	454.75	454.93	455.11	455.29	455.46
86.3	455.64	455.82	456.00	456.17	456.35	456.53	456.71	456.89	457.06	457.24
86.4	457.42	457.60	457.78	457.96	458.14	458.31	458.49	458.67	458.85	459.03
86.5	459.21	459.39	459.57	459.75	459.93	460.10	460.28	460.46	460.64	460.82
86.6	461.00	461.18	461.36	461.54	461.72	461.90	462.08	462.26	462.44	462.62
86.7	462.80	462 98	463.16	463.34	463.52	463.70	463.88	464.06	464.24	464.42
86.8	464.60	464.78	464.96	465.14	465.32	465.50	465.69	465.87	466.05	466.23
86.9	466.41	466.59	466.77	466.95	467.13	467.31	467.50	467.68	467.86	468.04
87.0	468.22	468.40	468.58	468.77	468.95	469.13	469.31	469.49	469.68	469.86
87.1	470.04	470.22	470.41	470.59	470.77	470.95	471.14	471.32	471.50	471.69
87.2	471.87	472.05	472.24	472.42	472.60	472.78	472.97	473.15	473.33	473.52
87.3	473.70	473.88	474.07	474.25	474.44	474.62	474.80	474.99	475.17	475.36
87.4	475.54	475.72	475.91	476.09	476.28	476.46	476.64	476.83	477.01	477.20
87.5	477.38	477.56	477.75	477.93	478.12	478.30	478.49	478.67	478.86	479.04
87.6	479.23	479.41	479.60	479.78	479.97	480.15	480.34	480.52	480.71	480.89
87.7	481.08	481.27	481.45	481.64	481.82	482.01	482.20	482.38	482.57	482.75
87.8	482.94	483.13	483.31	483.50	483.69	483.87	484.06	484.25	484.44	484.62
87.9	484.81	485.00	485.19	485.37	485.56	485.75	485.94	486.13	486.31	486.50
88.0	486.69	486.88	487.07	487.25	487.44	487.63	487.82	488.01	488.19	488.38
88.1	488.57	488.76	488.95	489.13	489.32	489.51	489.70	489.89	490.07	490.26
88.2	490.45	490.64	490.83	491.02	491.21	491.39	491.58	491.77	491.96	492.15
88.3	492.34	492.53	492.72	492.91	493.10	493.29	493.48	493.67	493.86	494.05
88.4	494.24	494.43	494.62	494.81	495.00	495.19	495.39	495.58	495.77	495.96
88.5	496.15	496.34	496.53	496.72	496.91	497.10	497.30	497.49	497.68	497.87
88.6	498.06	498.25	498.44	498.64	498.83	499.02	499.21	499.40	499.60	499.79
88.7	499.98	500.17	500.36	500.56	500.75	500.94	501.13	501.32	501.52	501.71
88.8	501.90	502.09	502.28	502.48	502.67	502.86	503.05	503.24	503.44	503.63
88.9	503.82	504.01	504.21	504.40	504.60	504.79	504.98	505.18	505.37	505.57
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**

Centig. Degrees.	Tenths of a Degree.									
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**
°	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.
89.0	505.76	505.95	506.15	506.34	506.54	506.73	506.92	507.12	507.31	507.51
89.1	507.70	507.89	508.09	508.28	508.48	508.67	508.87	509.06	509.26	509.45
89.2	509.65	509.84	510.04	510.23	510.43	510.62	510.82	511.01	511.21	511.40
89.3	511.60	511.80	511.99	512.19	512.38	512.58	512.78	512.97	513.17	513.36
89.4	513.56	513.76	513.95	514.15	514.35	514.54	514.74	514.94	515.14	515.33
89.5	515.53	515.73	515.92	516.12	516.32	516.51	516.71	516.91	517.11	517.30
89.6	517.50	517.70	517.90	518.09	518.29	518.49	518.69	518.89	519.08	519.28
89.7	519.48	519.68	519.88	520.07	520.27	520.47	520.67	520.87	521.06	521.26
89.8	521.46	521.66	521.86	522.06	522.26	522.46	522.66	522.86	523.05	523.25
89.9	523.45	523.65	523.85	524.05	524.25	524.45	524.65	524.85	525.05	525.25
90.0	525.45	525.65	525.85	526.05	526.25	526.45	526.65	526.85	527.05	527.25
90.1	527.45	527.65	527.85	528.05	528.25	528.45	528.66	528.86	529.06	529.26
90.2	529.46	529.66	529.86	530.07	530.27	530.47	530.67	530.87	531.08	531.28
90.3	531.48	531.68	531.88	532.09	532.29	532.49	532.69	532.89	533.10	533.30
90.4	533.50	533.70	533.91	534.11	534.31	534.51	534.72	534.92	535.12	535.33
90.5	535.53	535.73	535.94	536.14	536.35	536.55	536.75	536.96	537.16	537.37
90.6	537.57	537.77	537.98	538.18	538.39	538.59	538.79	539.00	539.20	539.41
90.7	539.61	539.81	540.02	540.22	540.43	540.63	540.84	541.04	541.25	541.45
90.8	541.66	541.87	542.07	542.28	542.48	542.69	542.90	543.10	543.31	543.51
90.9	543.72	543.93	544.13	544.34	544.54	544.75	544.96	545.16	545.37	545.57
91.0	545.78	545.99	546.19	546.40	546.61	546.81	547.03	547.23	547.44	547.64
91.1	547.85	548.06	548.26	548.47	548.68	548.88	549.09	549.30	549.51	549.71
91.2	549.92	550.13	550.34	550.54	550.75	550.96	551.17	551.38	551.58	551.79
91.3	552.00	552.21	552.42	552.63	552.84	553.04	553.25	553.46	553.67	553.88
91.4	554.09	554.30	554.51	554.72	554.93	555.14	555.35	555.56	555.77	555.98
91.5	556.19	556.40	556.61	556.82	557.03	557.24	557.45	557.66	557.87	558.08
91.6	558.29	558.50	558.71	558.92	559.13	559.34	559.55	559.76	559.97	560.18
91.7	560.39	560.60	560.81	561.03	561.24	561.45	561.66	561.87	562.09	562.30
91.8	562.51	562.72	562.93	563.15	563.36	563.57	563.78	563.99	564.21	564.42
91.9	564.63	564.86	565.06	565.27	565.48	565.69	565.91	566.12	566.33	566.55
92.0	566.76	566.97	567.19	567.40	567.61	567.85	568.04	568.25	568.46	568.68
92.1	568.89	569.10	569.32	569.53	569.75	569.96	570.17	570.39	570.60	570.82
92.2	571.03	571.24	571.46	571.67	571.89	572.10	572.32	572.53	572.75	572.96
92.3	573.18	573.40	573.61	573.83	574.04	574.26	574.48	574.69	574.91	575.12
92.4	575.34	575.56	575.77	575.99	576.20	576.42	576.64	576.85	577.07	577.28
92.5	577.50	577.72	577.93	578.15	578.37	578.58	578.80	579.02	579.24	579.45
92.6	579.67	579.89	580.10	580.32	580.54	580.75	580.97	581.19	581.41	581.62
92.7	581.84	582.06	582.28	582.49	582.71	582.93	583.15	583.37	583.58	583.80
92.8	584.02	584.24	584.46	584.68	584.90	585.11	585.33	585.55	585.77	585.99
92.9	586.21	586.43	586.65	586.87	587.09	587.31	587.53	587.75	587.97	588.19
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**

Centig. Degrees.	Tenths of a Degree.									
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**
°	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.
93.0	588.41	588.63	588.85	589.07	589.29	589.51	589.73	589.95	590.17	590.39
93.1	590.61	590.83	591.05	591.27	591.49	591.71	591.94	592.16	592.38	592.60
93.2	592.82	593.04	593.26	593.49	593.71	593.93	594.15	594.37	594.60	594.82
93.3	595.04	595.26	595.48	595.71	595.93	596.15	596.37	596 59	596.82	597.04
93.4	597.26	597.48	597.71	597.93	598.15	598.37	598.60	598.82	599.04	599.27
93.5	599.49	599.71	599.94	600.16	600.38	600.60	600.83	601.05	601.27	601.50
93.6	601.72	601.94	602.17	602.39	602.62	602.84	603.07	603.29	603.52	603.74
93.7	603.97	604.19	604.42	604.64	604.87	605.09	605.32	605.54	605.77	605.99
93.8	606.22	606.45	606.67	606.90	607.12	607.35	607.58	607.80	608.03	608.25
93.9	608.48	608.71	608.93	609.16	609.38	609.61	609.84	610.06	610.29	610.51
94.0	610.74	610.97	611.19	611.42	611.65	611.87	612.10	612.33	612.56	612.78
94.1	613.01	613.24	613.47	613.69	613.92	614.15	614.38	614.61	614.83	615.06
94.2	615.29	615.52	615.75	615.97	616.21	616.43	616.66	616.89	617.12	617.35
94.3	617.58	617.81	618.04	618.27	618.50	618.72	618.95	619.18	619.41	619.64
94.4	619.87	620.10	620.33	620.56	620.79	621.02	621.25	621.48	621.71	621.94
94.5	622.17	622.40	622.63	622.86	623.09	623.32	623.56	623.79	624.02	624.25
94.6	624.48	624.71	624.94	625.17	625.40	625.63	625.87	626.10	626.33	626.56
94.7	626.79	627.02	627.25	627.49	627.72	627.95	628.18	628.41	628.65	628.88
94.8	629.11	629.34	629.58	629.81	630.04	630.27	630.51	630.74	630.97	631.21
94.9	631.44	631.67	631.91	632.14	632.38	632.61	632.84	633.08	633.31	633.55
95.0	633.78	634.01	634.25	634.48	634.72	634.95	635.18	635.42	635.65	635.89
95.1	636.12	636.35	636.59	636.82	637.06	637.29	637.53	637.76	638.00	638.23
95.2	638.47	638.71	638.94	639.18	639.41	639.65	639.89	640.12	640.36	640.59
95.3	640.83	641.07	641.30	641.54	641.77	642.01	642.25	642.48	642.72	642.95
95.4	643.19	643.43	643.67	643.90	644.14	644.38	644.62	644.86	645.09	645.33
95.5	645.57	645.81	646.05	646.28	646.52	646.76	647.00	647.24	647.47	647.71
95.6	647.95	648.19	648.43	648.67	648.91	649.14	649.38	649.62	649.86	650.10
95.7	650.34	650.58	650.82	651.06	651.30	651.53	651.77	652.01	652.25	652.49
95.8	652.73	652.97	653.21	653.45	653.69	653.93	654.17	654.41	654.65	654.89
95.9	655.13	655.37	655.61	655.85	656.09	656.33	656.58	656.82	657.06	657.30
96.0	657.54	657.78	658.02	658.26	658.50	658.74	658.99	659.23	659.47	659.71
96.1	659.95	660.19	660.43	660.68	660.92	661.16	661.40	661.64	661.89	662.13
96.2	662.37	662.61	662.86	663.10	663.34	663.58	663.83	664.07	664.31	664.56
96.3	664.80	665.04	665.29	665.53	665.78	666.02	666.26	666.51	666.75	667.00
96.4	667.24	667.48	667.73	667.97	668.22	668.46	668.71	668.95	669.20	669.44
96.5	669.69	669.93	670.18	670.42	670.67	670.91	671.16	671.40	671.65	671.99
96.6	672.14	672.39	672.63	672.88	673.12	673.37	673.62	673.86	674.11	674.35
96.7	674.60	674.85	675.09	675.34	675.59	675.83	676.08	676.33	676.58	676.82
96.8	677.07	677.32	677.57	677.81	678.06	678.31	678.56	678.81	679.05	679.30
96.9	679.55	679.80	680.05	680.29	680.54	680.79	681.04	681.29	681.53	681.78
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**

Centig. Degrees.	Tenths of a Degree.									
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**
°	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.	Millim.
97.0	682.03	682.28	682.53	682.78	683.03	683.27	683.52	683.77	684.02	684.27
97.1	684.52	684.77	685.02	685.27	685.52	685.77	686.02	686.27	686.52	686.77
97.2	687.02	687.27	687.52	687.77	688.02	688.27	688.53	688.78	689.03	689.28
97.3	689.53	689.78	690.03	690.28	690.53	690.78	691.04	691.29	691.54	691.79
97.4	692.04	692.29	692.54	692.80	693.05	693.30	693.55	693.80	694.06	694.31
97.5	694.56	694.81	695.06	695.32	695.57	695.82	696.07	696.32	696.58	696.83
97.6	697.08	697.33	697.59	697.84	698.09	698.34	698.60	698.85	699.10	699.36
97.7	699.61	699.86	700.12	700.37	700.63	700.88	701.13	701.39	701.64	701.90
97.8	702.15	702.40	702.66	702.91	703.17	703.42	703.68	703.93	704.19	704.44
97.9	704.70	704.96	705.21	705.47	705.72	705.98	706.24	706.49	706.75	707.00
98.0	707.26	707.52	707.77	708.03	708.28	708.54	708.80	709.05	709.31	709.56
98.1	709.82	710.08	710.33	710.59	710.85	711.10	711.36	711.62	711.88	712.13
98.2	712.39	712.65	712.91	713.16	713.42	713.68	713.94	714.20	714.45	714.71
98.3	714.97	715.22	715.49	715.75	716.01	716.26	716.52	716.78	717.04	717.30
98.4	717.56	717.82	718.08	718.34	718.60	718.85	719.11	719.37	719.63	719.89
98.5	720.15	720.41	720.67	720.93	721.19	721.45	721.71	721.97	722.23	722.49
98.6	722.75	723.01	723.27	723.53	723.79	724.05	724.31	724.57	724.83	725.09
98.7	725.35	725.61	725.87	726.13	726.39	726.65	726.92	727.18	727.44	727.70
98.8	727.96	728.22	728.48	728.75	729.01	729.27	729.53	729.79	730.06	730.32
98.9	730.58	730.84	731.11	731.37	731.63	731.89	732.16	732.42	732.68	732.95
99.0	733.21	733.47	733.74	734.00	734.27	734.53	734.79	735.06	735.32	735.59
99.1	735.85	736.11	736.38	736.64	736.91	737.17	737.44	737.70	737.97	738.23
99.2	738.50	738.77	739.03	739.30	739.56	739.83	740.10	740.36	740.63	740.89
99.3	741.16	741.43	741.69	741.96	742.23	742.49	742.76	743.03	743.30	743.56
99.4	743.83	744.10	744.36	744.63	744.90	745.16	745.43	745.70	745.97	746.23
99.5	746.50	746.77	747.04	747.30	747.57	747.84	748.11	748.38	748.64	748.91
99.6	749.18	749.45	749.72	749.99	750.26	750.52	750.79	751.06	751.33	751.60
99.7	751.87	752.14	752.41	752.68	752.95	753.22	753.49	753.76	754.03	754.30
99.8	754.57	754.84	755.11	755.38	755.65	755.92	756.20	756.47	756.74	757.01
99.9	757.28	757.55	757.82	758.10	758.37	758.64	758.91	759.18	759.46	759.73
100.0	760.00	760.27	760.55	760.82	761.09	761.36	761.64	761.91	762.18	762.46
100.1	762.73	763.00	763.28	763.55	763.82	764.09	764.37	764.64	764.91	765.19
100.2	765.46	765.73	766.01	766.28	766.56	766.83	767.10	767.38	767.65	767.93
100.3	768.20	768.47	768.75	769.02	769.30	769.57	769.85	770.12	770.40	770.67
100.4	770.95	771.23	771.50	771.78	772.05	772.33	772.61	772.88	773.16	773.43
100.5	773.71	773.99	774.26	774.54	774.82	775.09	775.37	775.65	775.93	776.20
100.6	776.48	776.76	777.04	777.31	777.59	777.87	778.15	778.43	778.70	778.98
100.7	779.26	779.54	779.82	780.09	780.37	780.65	780.93	781.21	781.48	781.76
100.8	782.04	782.32	782.60	782.88	783.16	783.43	783.71	783.99	784.27	784.55
100.9	784.83	785.11	785.39	785.67	785.95	786.23	786.51	786.79	787.07	787.35
101.0	787.63	787.91	788.19	788.47	788.75	789.03	789.31	789.59	789.87	790.15
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**

VII. TABLE TO REDUCE, BY INTERPOLATION,

THE OBSERVATIONS TO THE SAME ABSOLUTE TIME.

DECIMALS OF AN HOUR.

Min.	Decimal.	Min.	Decimal.	Min.	Decimal.	Min.	Decimal.	Min.	Decimal.	Min.	Decimal.
1	.017	11	.183	21	.350	31	.517	41	.683	51	.850
2	.033	12	.200	22	.367	32	.533	42	.700	52	.867
3	.050	13	.217	23	.383	33	.550	43	.717	53	.883
4	.067	14	.233	24	.400	34	.567	44	.733	54	.900
5	.083	15	.250	25	.417	35	.583	45	.750	55	.917
6	.100	16	.267	26	.433	36	.600	46	.767	56	.933
7	.117	17	.283	27	.450	37	.617	47	.783	57	.950
8	.133	18	.300	28	.467	38	.633	48	.800	58	.967
9	.150	19	.317	29	.483	39	.650	49	.817	59	.983
10	.167	20	.333	30	.500	40	.667	50	.833	60	1.000

Table for Correction of Curvature and Refraction.

From a mountain, when furnished with a barometer, or with an apparatus for determining the temperature of boiling water, and a pocket level, an observer can find the elevations of distant points, which are in sight, but lower than the mountain itself on which he stands. He has only to seek, with the level, the point on the slope of the mountain which corresponds to the point at a distance that he wishes to determine, and to take there a barometrical, or a boiling point observation. This observation is to be calculated in the usual way, but the result must be corrected for the curvature of the surface of the globe, and for the atmospheric refraction, by means of the following Table.

This method, which furnishes the means of multiplying, without much trouble, the measurements of heights, gives approximations which are sufficient for most of the purposes of Physical Geography. It may even seem preferable to direct measurements for determining the mean elevation of certain physical lines, which are best estimated when seen from a distance; such as the upper limit of the growth of trees, the limits of different kinds of vegetation, that of permanent snow, that of the mean elevation of the crest of a mountain range, &c.

Showing the Difference of the Apparent and True Level, in feet and decimals, for Distances in feet and miles.

Distances in Feet.	Correction in Feet.			Distances in Miles.	Correction in Feet.		
	For Curvature.	For Refraction.	For Curvature and Refraction.		For Curvature.	For Refraction.	For Curvature and Refraction.
100	.00024	.00004	.00020	$\frac{1}{4}$	.0417	.0060	.0357
150	.00054	.00008	.00046	$\frac{1}{2}$	.1668	.0238	.1430
200	.00094	.00013	.00083	$\frac{3}{4}$	.3752	.0536	.3216
250	.00149	.00021	.00128	1	.6670	.0953	.5717
300	.00215	.00031	.00184	$1\frac{1}{2}$	1.5008	.2144	1.2864
350	.00293	.00042	.00251	2	2.6680	.3811	2.2869
400	.00383	.00055	.00328	$2\frac{1}{2}$	4.1688	.5955	3.5733
450	.00484	.00069	.00415	3	6.0030	.8561	5.1469
500	.00598	.00085	.00513	$3\frac{1}{2}$	8.1708	1.1673	7.0035
550	.00724	.00103	.00621	4	10.6720	1.5246	9.1474
600	.00861	.00123	.00738	$4\frac{1}{2}$	13.5468	1.9295	11.5773
650	.01010	.00144	.00866	5	16.6750	2.3821	14.2929
700	.01172	.00167	.01005	$5\frac{1}{2}$	20.1769	2.8824	17.2945
750	.01345	.00192	.01153	6	24.0120	3.4303	20.5817
800	.01531	.00219	.01312	$6\frac{1}{2}$	28.1809	4.0258	24.1551
850	.01728	.00247	.01481	7	32.6830	4.6690	28.0143
900	.01938	.00277	.01661	$7\frac{1}{2}$	37.5190	5.3599	32.1591
950	.02159	.00308	.01851	8	42.6880	6.0997	36.5883
1000	.02392	.00333	.02059	$8\frac{1}{2}$	48.1910	6.8844	41.3066
1050	.02638	.00377	.02261	9	54.0270	7.7181	46.3089
1100	.02895	.00414	.02481	$9\frac{1}{2}$	60.1971	8.5996	51.5975
1150	.03164	.00452	.02712	10	66.7000	9.5286	57.1714
1200	.03445	.00492	.02953	11	80.7070	11.5296	69.1774
1250	.03738	.00534	.03204	12	96.0480	13.7211	82.3269
1300	.04043	.00578	.03465	13	112.7230	16.1033	96.6197
1350	.04361	.00623	.03738	14	130.7320	18.6760	112.0560
1400	.04689	.00670	.04019	15	150.0750	21.4393	128.6357
1450	.05030	.00719	.04311	16	170.7520	24.3931	146.3589
1500	.05383	.00769	.04614	17	192.7630	27.5376	165.2254
1550	.05748	.00821	.04927	18	216.1086	30.8727	185.2359
1600	.06125	.00875	.05250	19	240.7870	34.3981	206.3889
1650	.06514	.00931	.05583	20	266.8000	38.1143	228.6857
1700	.06914	.00988	.05926				
1750	.07327	.01047	.06280				
1800	.07752	.01107	.06645				
1850	.08188	.01170	.07018				
1900	.08637	.01234	.07403				
1950	.09098	.01300	.07798				
2000	.09570	.01367	.08203				

APPENDIX

TO

THE HYPSOMETRICAL TABLES.

COMPARISON OF THE DIFFERENT MEASURES OF LENGTH MOST GENERALLY USED FOR INDICATING ALTITUDES.

COMPARISON

OF THE

MEASURES OF LENGTH MOST GENERALLY USED FOR INDICATING HEIGHTS.

Of the different measures of length the following most generally prevail for expressing altitudes. For the sake of their comparison, the relation between each of them, and both the English foot and metre, is given in the following table : —

I. *Relation between the Measures of Length used in different Countries.**

Units.	English Feet.	Metres.
English yard	= 3.	= 0.91438347
English foot	= 1.	= 0.30479449
Russian foot	= 1.	= 0.30479449
Metre	= 3.2808992	= 1.
French Toise	= 6.394590	= 1.9490366
Paris, or old French foot	= 1.065765	= 0.3248394
Rhine foot, Prussian and Danish	= 1.029722	= 0.313854
Bavarian foot	= 0.957561	= 0.291859
Klafter of Vienna = 6 Austrian feet,	= 6.222768	= 1.896654
Austrian foot, $\frac{1}{6}$ of a Klafter,	= 1.037128	= 0.316111
Vara, Spanish and Mexican, = 3 Castilian feet,	= 2.78209	= 0.847965
Castilian foot	= 0.927363	= 0.282655

By far the greater number of published altitudes being given either in Metres, French Toises, Paris Feet, or English Feet, and the best tables for calculating heights, giving the results in one or another of these measures, the following tables have been calculated to facilitate their conversion into each other.

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* For reference, see J. H. Alexander's "Dictionary of Weights and Measures"; T. J. Lee, "A Collection of Tables and Formulæ, useful in Geology," &c.; Balbi, "Tableau comparitif des Monnaies, Poids, et Mesures," &c.

1 Metre = 3.2808992 English Feet.

Metres.	Metres. (Units.)									
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**
	Eng.Feet.	Eng.Feet.	Eng.Feet.	Eng.Feet.	Eng.Feet.	Eng.Feet.	Eng.Feet.	Eng.Feet.	Eng.Feet.	Eng.Feet.
0	0.0	3.28	6.56	9.84	13.12	16.40	19.69	22.97	26.25	29.53
10	32.81	36.09	39.37	42.65	45.93	49.21	52.50	55.78	59.06	62.34
20	65.62	68.90	72.18	75.46	78.74	82.02	85.31	88.59	91.87	95.15
30	98.43	101.71	104.99	108.27	111.55	114.83	118.12	121.40	124.68	127.96
40	131.24	134.52	137.80	141.08	144.36	147.64	150.92	154.20	157.48	160.76
50	164.04	167.33	170.61	173.89	177.17	180.45	183.73	187.01	190.29	193.57
60	196.85	200.13	203.42	206.70	209.98	213.26	216.54	219.82	223.10	226.38
70	229.66	232.94	236.22	239.51	242.79	246.07	249.35	252.63	255.91	259.19
80	262.47	265.75	269.03	272.31	275.60	278.88	282.16	285.44	288.72	292.00
90	295.28	298.56	301.84	305.12	308.40	311.68	314.97	318.25	321.53	324.81
100	328.09	331.37	334.65	337.93	341.21	344.49	347.78	351.06	354.34	357.62
110	360.90	364.18	367.46	370.74	374.02	377.30	380.59	383.87	387.15	390.43
120	393.71	396.99	400.27	403.55	406.83	410.11	413.40	416.68	419.96	423.24
130	426.52	429.80	433.08	436.36	439.64	442.92	446.21	449.49	452.77	456.05
140	459.33	462.61	465.89	469.17	472.45	475.73	479.02	482.30	485.58	488.86
150	492.13	495.42	498.70	501.98	505.26	508.54	511.82	515.10	518.38	521.56
160	524.94	528.22	531.50	534.78	538.06	541.34	544.63	547.91	550.19	553.47
170	557.75	561.03	564.31	567.59	570.87	574.15	577.44	580.72	584.00	587.28
180	590.56	593.84	597.12	600.40	603.68	606.96	610.25	613.53	616.81	620.09
190	623.37	628.65	629.93	633.21	636.49	639.77	643.06	646.34	649.62	652.90
200	656.18	659.46	662.74	666.02	669.30	672.58	675.87	679.15	682.43	685.71
210	688.99	692.27	695.55	698.83	702.11	705.39	708.68	711.96	715.24	718.52
220	721.80	725.08	728.36	731.64	734.92	738.20	741.49	744.77	748.05	751.33
230	754.61	757.89	761.17	764.45	767.73	771.01	774.30	777.58	780.86	784.14
240	787.42	790.70	793.98	797.26	800.54	803.82	807.11	810.39	813.67	816.95
250	820.22	823.51	826.79	830.07	833.35	836.63	839.91	843.19	846.47	849.75
260	853.03	856.31	860.59	863.87	866.15	879.43	882.72	876.00	879.28	882.56
270	885.84	889.12	892.40	895.68	898.96	902.24	905.53	908.81	912.09	915.37
280	918.65	921.93	925.21	928.49	931.77	935.05	938.34	941.62	944.90	948.18
290	951.46	954.74	958.02	961.30	964.58	967.86	971.15	974.43	977.71	980.99
300	984.27	987.55	990.83	994.11	997.39	1000.67	1003.96	1007.24	1010.52	1013.80
310	1017.08	1020.36	1023.64	1026.92	1030.20	1033.48	1036.77	1040.05	1043.33	1046.61
320	1049.89	1053.17	1056.45	1059.73	1063.01	1066.29	1069.58	1072.86	1076.14	1079.42
330	1082.70	1085.98	1089.26	1092.54	1095.82	1099.10	1102.39	1105.67	1108.95	1112.23
340	1115.51	1118.79	1122.07	1125.35	1128.63	1131.91	1135.20	1138.48	1141.76	1145.04
350	1148.31	1152.60	1154.88	1158.16	1161.44	1164.72	1168.00	1171.28	1174.56	1177.84
360	1181.12	1184.40	1187.68	1190.96	1194.24	1197.52	1200.81	1204.09	1207.37	1210.65
370	1213.93	1217.21	1220.49	1223.77	1227.05	1230.33	1233.62	1236.90	1240.18	1243.46
380	1246.74	1250.02	1253.30	1256.58	1259.86	1263.14	1266.43	1269.71	1272.99	1276.27
390	1279.55	1282.83	1286.11	1289.39	1292.67	1295.95	1299.24	1302.52	1305.80	1309.08
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**

400 to 790mm.

Metres.	Metres. (Units.)									
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**
	Eng.Feet.	Eng.Feet.	Eng.Feet.	Eng.Feet.	Eng.Feet.	Eng.Feet.	Eng.Feet.	Eng.Feet.	Eng.Feet.	Eng.Feet.
400	1312.36	1315.64	1318.92	1322.20	1325.48	1328.76	1332.05	1335.33	1338.61	1341.89
410	1345.17	1348.45	1351.73	1355.01	1358.29	1361.57	1364.86	1368.14	1371.42	1374.70
420	1377.98	1381.26	1384.54	1387.82	1391.10	1394.38	1397.67	1400.95	1404.23	1407.51
430	1410.79	1414.07	1417.35	1420.63	1423.91	1427.19	1430.48	1433.76	1437.04	1440.32
440	1443.60	1446.88	1450.16	1453.44	1456.72	1460.00	1463.29	1466.57	1469.85	1473.13
450	1476.40	1479.69	1482.97	1486.25	1489.53	1492.81	1496.09	1499.37	1502.65	1505.93
460	1509.21	1512.49	1515.77	1519.05	1522.33	1525.61	1528.90	1532.18	1535.46	1538.74
470	1542.02	1545.30	1548.58	1551.86	1555.14	1558.42	1561.71	1564.99	1568.27	1571.55
480	1574.83	1578.11	1581.39	1584.67	1587.95	1591.23	1594.52	1597.80	1601.08	1604.36
490	1607.64	1610.92	1614.20	1617.48	1620.76	1624.04	1627.33	1630.61	1633.89	1637.17
500	1640.45	1643.73	1647.01	1650.29	1653.57	1656.85	1660.14	1663.42	1666.70	1669.98
510	1673.26	1676.54	1679.82	1683.10	1686.38	1689.66	1692.95	1696.23	1699.51	1702.79
520	1706.07	1709.35	1712.63	1715.91	1719.19	1722.47	1725.76	1729.04	1732.32	1735.60
530	1738.88	1742.16	1745.44	1748.72	1752.00	1755.28	1758.57	1761.85	1765.13	1768.41
540	1771.69	1774.97	1778.25	1781.53	1784.81	1788.09	1791.38	1794.66	1797.94	1801.22
550	1804.49	1807.78	1811.06	1814.34	1817.62	1820.90	1824.18	1827.46	1830.74	1834.02
560	1837.30	1840.58	1843.86	1847.14	1850.42	1853.70	1856.99	1860.27	1863.55	1866.83
570	1870.11	1873.39	1876.67	1879.95	1883.23	1886.51	1889.80	1893.08	1896.36	1899.64
580	1902.92	1906 20	1909.48	1912.76	1916.04	1919.32	1922.61	1925.99	1929.17	1932.45
590	1935.73	1939.01	1942.29	1945.57	1948.85	1952.13	1955.41	1958.70	1961.98	1965.26
600	1968.54	1971.82	1975.10	1978.38	1981.66	1984.94	1988.23	1991.51	1994.79	1998.07
610	2001.35	2004.63	2007.91	2011.19	2014.47	2017.75	2021.04	2024.32	2027.60	2030.88
620	2034.16	2037.44	2040.72	2044.00	2048.28	2050.56	2053.85	2057.13	2060.41	2063.69
630	2066.97	2070.25	2073.53	2076.81	2080.09	2083.37	2086.66	2089.94	2093.22	2096.50
640	2099.78	2103.06	2106.34	2109.62	2112.90	2116.18	2119.47	2122.75	2126.03	2129.31
650	2132.58	2135.87	2139.15	2142.43	2145.71	2148.99	2152.27	2155.55	2158.83	2162.11
660	2165.39	2168.67	2171.95	2175.23	2178.51	2181.79	2185.08	2188.36	2191.64	2194.92
670	2198.20	2201.48	2204.76	2208.04	2211.32	2214.60	2217.89	2221.17	2224.45	2227.73
680	2231.01	2234.29	2237.57	2240.35	2244.13	2247.41	2250.70	2253.98	2257.26	2260.54
690	2263.82	2267.10	2270.38	2273.66	2276.94	2280.22	2283.51	2286.79	2290.07	2293.35
700	2296.63	2299.91	2303.19	2306.47	2309.75	2313.03	2316.32	2319.60	2322.88	2326.16
710	2329.44	2332.72	2336.00	2339.28	2342.56	2345.84	2349.13	2352.41	2355.69	2358.97
720	2362.25	2365.53	2368.81	2372.09	2375.37	2378.65	2381.94	2385.22	2388.50	2391.78
730	2395.06	2398.34	2401.62	2404.90	2408.18	2411.46	2414.75	2418.03	2421.31	2424.59
740	2427.87	2431.15	2434.43	2437.71	2440.99	2444.27	2447.56	2450.84	2454.12	2457.40
750	2460.67	2463.95	2467.23	2470.51	2473.79	2477.07	2480.36	2483.64	2486.92	2490.20
760	2493.48	2496.76	2500.04	2503.32	2506.60	2509.88	2513.17	2516.45	2519.73	2523.01
770	2526.39	2529.57	2532.85	2536.13	2539.41	2542.69	2545.98	2549.26	2552.54	2555.82
780	2559.10	2562.38	2565.66	2568.94	2572.22	2575.50	2578.89	2582.07	2585.35	2588.63
790	2591.91	2595.19	2598.47	2601.75	2605.03	2608.31	2611.60	2614.88	2618.16	2621.44
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**

800 to 1190mm.

Metres.	Metres. (Units.)									
	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.
	Eng.Feet.	Eng.Feet.	Eng.Feet.	Eng.Feet.	Eng.Feet.	Eng.Feet.	Eng.Feet.	Eng.Feet.	Eng.Feet.	Eng.Feet.
800	2624.72	2628.00	2631.28	2634.56	2637.84	2641.12	2644.41	2647.69	2650.97	2654.25
810	2657.53	2660.81	2664.09	2667.37	2670.65	2673.93	2677.22	2680.50	2683.78	2687.06
820	2690.34	2693.62	2696.90	2700.18	2703.46	2706.74	2710.03	2713.31	2716.59	2719.87
830	2723.15	2726.43	2729.71	2732.99	2736.27	2739.55	2742.84	2746.12	2749.40	2752.68
840	2755.96	2759.24	2762.52	2765.80	2769.08	2772.36	2775.65	2778.93	2782.21	2785.49
850	2788.76	2792.04	2795.33	2798.61	2801.89	2805.17	2808.45	2811.73	2815.01	2818.29
860	2821.57	2824.85	2828.13	2831.41	2834.79	2837.97	2841.26	2844.54	2847.82	2851.10
870	2854.38	2857.66	2860.94	2864.22	2867.50	2870.78	2874.07	2877.55	2880.63	2883.91
880	2887.19	2890.47	2893.75	2897.03	2900.31	2903.69	2906.88	2910.16	2913.44	2916.72
890	2920.00	2923.28	2926.56	2929.84	2933.12	2936.40	2939.79	2942.97	2946.25	2949.53
900	2952.81	2956.09	2959.37	2962.65	2965.93	2969.21	2972.50	2975.78	2979.06	2982.34
910	2985.62	2988.90	2992.18	2995.46	2998.74	3002.02	3005.31	3008.59	3011.87	3015.15
920	3018.43	3021.71	3024.99	3028.27	3031.55	3034.83	3038.12	3041.40	3044.68	3047.96
930	3051.24	3054.52	3057.80	3061.08	3064.36	3069.64	3070.93	3074 21	3077.49	3080.77
940	3084.05	3087.33	3090.61	3093.89	3097.17	3100.45	3103.74	3107.02	3110.30	3113.58
950	3116.85	3120.14	3123.42	3126.70	3129.98	3133.26	3136.54	3139.82	3143.10	3146.38
960	3149.66	3152.94	3156.22	3159.50	3162.78	3166.06	3169.35	3172.63	3175.91	3179.29
970	3182.47	3185.75	3189.03	3192.31	3195.59	3198.87	3202.16	3205.44	3208.72	3212.00
980	3215.28	3218.56	3221.84	3225.12	3228.40	3231.68	3234.97	3238.25	3241.53	3244.81
990	3248.09	3251.37	3254.65	3257.93	3261.71	3264.59	3267.78	3271.06	3274.34	3277.62
1000	3280.90	3284.18	3287.46	3290.74	3294.02	3297.30	3300.59	3303.87	3307.15	3310.43
1010	3313.71	3316.99	3320.27	3323.55	3326.83	3330.11	3333.39	3336.67	3339.96	3343.24
1020	3346.52	3349.80	3353.08	3356.36	3359.64	3362.92	3366.20	3369.48	3372.76	3376.04
1030	3379.33	3382.61	3385.89	3389.17	3392.45	3395.73	3399.01	3402.29	3405.57	3408.85
1040	3412.14	3415.42	3418.70	3421.98	3425.26	3428.54	3431.82	3435.10	3438.38	3441.66
1050	3444.94	3448.23	3451.51	3454.79	3458.07	3461.35	3464.63	3467.91	3471.19	3474.47
1060	3477.75	3481.04	3484.32	3487.60	3490.88	3494.16	3497.44	3500.72	3504.00	3507.28
1070	3510.56	3513.85	3517.13	3520.41	3523.69	3526.97	3530.25	3533.53	3536.81	3540.09
1080	3543.37	3546.66	3549.94	3553.22	3556.50	3559.78	3563.06	3566.34	3569.62	3572.90
1090	3576.18	3579.47	3582.75	3586.02	3589.31	3592.59	3595.87	3599.15	3602.43	3605.71
1100	3608.99	3612.27	3615.55	3618.83	3622.11	3625.39	3628.67	3631.96	3635.24	3638.52
1110	3641.80	3645.08	3648.36	3651.64	3654.92	3658.20	3661.48	3664.76	3668.05	3671.33
1120	3674.61	3677.89	3681.17	3684.45	3687.73	3691.01	3694.29	3697.57	3700.85	3704.14
1130	3707.42	3710.70	3713.98	3717.26	3720.54	3723.82	3727.10	3730.38	3733.66	3736.94
1140	3740.22	3743.51	3746.79	3750.07	3753.35	3756.63	3759.91	3763.19	3766.47	3769.75
1150	3773.03	3776.31	3779.60	3782.88	3786.16	3789.44	3792.72	3796.00	3799.28	3802.56
1160	3805.84	3809.12	3812.40	3815.69	3818.97	3822.25	3825.53	3828.81	3832.09	3835.37
1170	3838.65	3841.93	3845.21	3848.50	3851.78	3855.06	3858.34	3861.62	3864.90	3868.18
1180	3871.46	3874.74	3878.02	3881.30	3884.58	3887.87	3891.15	3894.43	3897.71	3900.99
1190	3904.27	3907.55	3910.83	3914.11	3917.39	3920.68	3923.96	3927.24	3930.52	3933.80
	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.

1200 to 1590mm.

Metres.	Metres. (Units.)									
	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.
	Eng.Feet.	Eng.Feet.	Eng.Feet.	Eng.Feet.	Eng.Feet.	Eng.Feet.	Eng.Feet.	Eng.Feet.	Eng.Feet.	Eng.Feet.
1200	3937.08	3940.36	3943.64	3946.92	3950.20	3953.48	3956.76	3960.05	3963.33	3966.61
1210	3969.89	3973.17	3976.45	3979.73	3983.01	3986.29	3989.57	3992.85	3996.14	3999.42
1220	4002.70	4005.98	4009.26	4012.54	4015.82	4019.10	4022.38	4025.66	4028.94	4032.23
1230	4035.51	4038.79	4042.07	4045.35	4048.63	4051.91	4055.19	4058.47	4061.75	4065.03
1240	4068.32	4071.60	4074.88	4078.16	4081.44	4084.72	4088.00	4091.28	4094.56	4097.84
1250	4101.12	4104.40	4107.69	4110.97	4114.25	4117.53	4120.81	4124.09	4127.37	4130.65
1260	4133.93	4137.21	4140.49	4143.78	4147.06	4150.34	4153.62	4156.90	4160.18	4163.46
1270	4166.74	4170.02	4173.30	4176.58	4179.87	4183.15	4186.43	4189.71	4192.99	4196.27
1280	4199.55	4202.83	4206.11	4209.39	4212.67	4215.96	4219.24	4222.52	4225.80	4229.08
1290	4232.36	4235.64	4238.92	4242.20	4245.48	4248.76	4252.05	4255.33	4258.61	4261.89
1300	4265.17	4268.45	4271.73	4275.01	4278.29	4281.57	4284.85	4288.14	4291.42	4294.70
1310	4297.98	4301.26	4304.54	4307.82	4311.10	4314.38	4317.66	4320.94	4324.23	4327.51
1320	4330.79	4334.07	4337.35	4340.63	4343.91	4347.19	4350.47	4353.75	4357.03	4360.32
1330	4363.60	4366.88	4370.16	4373.44	4376.72	4380.00	4383.28	4386.56	4389.84	4393.12
1340	4396.40	4399.69	4402.97	4406.25	4409.53	4412.81	4416.09	4419.37	4422.65	4425.93
1350	4429.21	4432.49	4435.78	4439.06	4442.34	4445.62	4448.90	4452.18	4455.46	4458.74
1360	4462.02	4465.30	4468.58	4471.87	4475.15	4478.43	4481.71	4484.99	4488.27	4491.55
1370	4494.83	4498.11	4501.39	4504.67	4507.96	4511.24	4514.52	4517.80	4521.08	4524.36
1380	4527.64	4530.92	4534.20	4537.28	4540.56	4543.85	4547.13	4550.41	4553.69	4557.17
1390	4560.45	4563.73	4567.01	4570.29	4573.57	4576.85	4580.14	4583.42	4586.70	4589.98
1400	4593.26	4596.54	4599.82	4603.10	4606.38	4609.66	4612.94	4616.23	4619.51	4622.79
1410	4626.07	4629.35	4632.63	4635.91	4639.19	4642.47	4645.75	4649.03	4652.32	4655.60
1420	4658.88	4662.16	4665.44	4668.72	4672.00	4675.28	4678.56	4681.84	4685.12	4688.41
1430	4691.69	4694.97	4698.25	4701.53	4704.81	4708.09	4711.37	4714.65	4717.93	4721.21
1440	4724.49	4727.78	4731.06	4734.34	4737.62	4740.90	4744.18	4747.46	4750.74	4754.02
1450	4757.30	4760.58	4763.87	4767.15	4770.43	4773.71	4776.99	4780.27	4783.55	4786.83
1460	4790.11	4793.39	4796.67	4799.96	4803.24	4806.52	4809.80	4813.08	4816.36	4819.64
1470	4822.92	4826.20	4829.48	4832.76	4836.05	4839.33	4842.61	4845.89	4849.17	4852.45
1480	4855.73	4859.01	4862.29	4865.57	4868.85	4872.14	4875.42	4878.70	4881.98	4885.26
1490	4888.54	4891.82	4895.10	4898.38	4901.66	4904.94	4908.23	4911.51	4914.79	4918.07
1500	4921.35	4924.63	4927.91	4931.19	4934.47	4937.75	4941.03	4944.32	4947.60	4950.88
1510	4954.16	4957.44	4960.72	4964.00	4967.28	4970.56	4973.84	4977.12	4980.41	4983.69
1520	4986.97	4990.25	4993.53	4996.81	5000.09	5003.37	5006.65	5009.93	5013.21	5016.50
1530	5019.78	5023.06	5026.34	5029.62	5032.90	5036.18	5039.46	5042.74	5046.02	5049.30
1540	5052.58	5055.87	5059.15	5062.43	5065.71	5068.99	5072.27	5075.55	5078.83	5082.11
1550	5085.39	5088.67	5091.96	5095.24	5098.52	5101.80	5105.08	5108.36	5111.64	5114.92
1560	5118.20	5121.48	5124.76	5128.05	5131.33	5134.61	5137.89	5141.17	5144.45	5147.73
1570	5151.01	5154.29	5157.57	5160.85	5164.14	5167.42	5170.70	5173.98	5177.26	5180.54
1580	5183.82	5187.10	5190.38	5193.66	5196.94	5200.23	5203.51	5206.79	5210.07	5213.35
1590	5216.63	5219.91	5223.19	5226.47	5229.75	5233.03	5236.32	5239.60	5242.88	5246.16
	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.

1600 to 2000mm.

Metres.	Metres. (Units.)									
	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.
	Eng.Feet.	Eng.Feet.	Eng.Feet.	Eng.Feet.	Eng.Feet.	Eng.Feet.	Eng.Feet.	Eng.Feet.	Eng.Feet.	Eng.Feet.
1600	5249.44	5252.72	5256.00	5259.28	5262.56	5265.84	5269.12	5272.41	5275.69	5278.97
1610	5282.25	5285.53	5288.81	5292.09	5295.37	5292.65	5301.93	5305.21	5308.50	5311.78
1620	5315.06	5318.34	5321.62	5324.90	5328.18	5331.46	5334.74	5338.02	5341.30	5344.59
1630	5347.87	5351.15	5354.43	5357.71	5360.99	5364.27	5367.55	5370.83	5374.11	5377.39
1640	5380.67	5383.96	5387.24	5390.52	5393.80	5397.08	5400.36	5403.64	5406.92	5410.20
1650	5413.48	5416.76	5420.05	5423.33	5426.61	5429.89	5433.17	5436.45	5439.73	5443.01
1660	5446.29	5449.57	5452.85	5456.14	5459.42	5462.70	5465.98	5469.26	5472.54	5475.82
1670	5479.10	5482.38	5485.66	5488.94	5492.23	5495.51	5498.79	5502.07	5505.35	5508.63
1680	5511.91	5515.19	5518.47	5521.75	5525.03	5528.32	5531.60	5534.88	5538.16	5541.44
1690	5544.72	5548.00	5551.28	5554.56	5557.84	5561.12	5564.41	5567.69	5570.97	5574.25
1700	5577.53	5580.81	5584.09	5587.37	5590.65	5593.93	5597.21	5600.49	5603.78	5607.06
1710	5610.34	5613.62	5616.90	5620.18	5623.46	5626.74	5630.02	5633.30	5636.59	5639.87
1720	5643.15	5646.43	5649.71	5652.99	5656.27	5659.55	5662.83	5666.11	5669.39	5672.68
1730	5675.96	5679.24	5682.52	5685.80	5689.08	5692.36	5695.64	5698.92	5702.20	5705.48
1740	5708.76	5712.05	5715.33	5718.61	5721.89	5725.17	5728.45	5731.73	5735.01	5738.29
1750	5741.57	5744.85	5748.14	5751.42	5754.70	5757.98	5761.26	5764.54	5767.82	5771.10
1760	5774.38	5777.66	5780.94	5784.23	5787.51	5790.79	5794.07	5797.35	5800.63	5803.91
1770	5807.19	5810.47	5813.75	5817.03	5820.32	5823.60	5826.88	5830.16	5833.44	5836.72
1780	5840.00	5843.28	5846.56	5849.84	5853.12	5856.41	5859.69	5862.97	5866.25	5869.53
1790	5872.81	5876.09	5879.37	5882.65	5885.93	5889.21	5892.49	5895.78	5899.06	5902.34
1800	5905.62	5908.90	5912.18	5915.46	5918.74	5922.02	5925.30	5928.58	5931.87	5935.15
1810	5938.43	5941.71	5944.99	5948.27	5951.55	5954.83	5958.11	5961.39	5964.68	5967.96
1820	5971.24	5974.52	5977.80	5981.08	5984.36	5987.64	5990.92	5994.20	5997.48	6000.77
1830	6004.05	6007.33	6010.61	6013.89	6017.17	6020.45	6023.73	6027.01	6030.29	6033.57
1840	6036.85	6040.14	6043.42	6046.70	6049.98	6053.26	6056.54	6059.82	6063.10	6066.38
1850	6069.66	6072.94	6076.23	6079.51	6082.79	6086.07	6089.35	6092.63	6095.91	6099.19
1860	6102.47	6105.75	6109.03	6112.32	6115.60	6118.88	6122.16	6125.44	6128.72	6132.00
1870	6135.28	6138.56	6141.84	6145.12	6148.41	6151.69	6154.97	6158.25	6161.53	6164.81
1880	6168.09	6171.37	6174.65	6177.93	6181.21	6184.49	6187.78	6191.06	6194.34	6197.62
1890	6200.90	6204.18	6207.46	6210.74	6214.02	6217.30	6220.58	6223.87	6227.15	6230.43
1900	6233.71	6236.99	6240.27	6243.55	6246.83	6250.11	6253.39	6256.67	6259.96	6263.24
1910	6266.52	6269.80	6273.08	6276.36	6279.64	6282.92	6286.20	6289.48	6292.77	6296.05
1920	6299.33	6302.61	6305.89	6309.17	6312.45	6315.73	6329.01	6322.29	6325.57	6328.86
1930	6332.14	6335.42	6338.70	6341.98	6345.26	6348.54	6351.82	6355.10	6358.38	6361.66
1940	6364.94	6368.23	6371.51	6374.79	6378.07	6381.35	6384.63	6387.91	6391.19	6394.47
1950	6397.75	6401.03	6404.32	6407.60	6410.88	6414.16	6417.44	6420.72	6424.00	6427.28
1960	6430.56	6433.84	6437.12	6440.41	6443.69	6446.97	6450.25	6453.53	6456.81	6460.09
1970	6463.37	6466.65	6469.93	6473.21	6476.50	6479.78	6483.06	6486.34	6489.62	6492.90
1980	6496.18	6499.46	6502.74	6506.02	6509.30	6512.58	6515.87	6519.15	6522.43	6525.71
1990	6528.99	6532.27	6535.55	6538.83	6542.11	6545.39	6548.67	6551.96	6555.24	6558.52
2000	6561.80	6565.08	6568.36	6571.64	6574.92	6578.20	6581.48	6584.76	6588.05	6591.33
	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.

Proportional Parts.

Metres.	Decimetres.									
	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.
	Eng.Feet.	Eng.Feet.	Eng.Feet.	Eng.Feet.	Eng.Feet.	Eng.Feet.	Eng.Feet.	Eng.Feet.	Eng.Feet.	Eng.Feet.
0	0.0000	0.3281	0.6562	0.9843	1.3124	1.6405	1.9685	2.2966	2.6247	2.9528
1	3.2809	3.6090	3.9371	4.2652	4.5933	4.9213	5.2494	5.5775	5.9056	6.2337
2	6.5618	6.8899	7.2180	7.5461	7.8742	8.2022	8.5303	8.8584	9.1865	9.5146
3	9.8427	10.1708	10.4989	10.8270	11.1551	11.4831	11.8112	12.1393	12.4674	12.7955
4	13.1236	13.4517	13.7798	14.1079	14.4360	14.7640	15.0921	15.4202	15.7483	16.0764
5	16.4045	16.7326	17.0607	17.3888	17.7169	18.0449	18.3730	18.7011	19.0292	19.3573
6	19.6854	20.0135	20.3416	20.6697	20.9978	21.3258	21.6539	21.9820	22.3101	22.6382
7	22.9663	23.2944	23.6225	23.9506	24.2787	24.6067	24.9348	25.2629	25.5910	25.9191
8	26.2472	26.5753	26.9034	27.2315	27.5596	27.8876	28.2157	28.5438	28.8719	29.2000
9	29.5281	29.8562	30.1843	30.5124	30.8405	31.1685	31.4966	31.8247	31.1528	32.4809

Deci-metres.	Centimetres.									
	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.
	Eng.Feet.	Eng.Feet.	Eng.Feet.	Eng.Feet.	Eng.Feet.	Eng.Feet.	Eng.Feet.	Eng.Feet.	Eng.Feet.	Eng.Feet.
0	0.00000	0.03281	0.06562	0.09843	0.13124	0.16404	0.19685	0.22966	0.26247	0.29528
1	0.32809	0.36090	0.39371	0.42652	0.45933	0.49213	0.52494	0.55775	0.59056	0.62337
2	0.65618	0.68899	0.72180	0.75461	0.78742	0.82022	0.85303	0.88584	0.91865	0.95146
3	0.98427	1.01708	1.04989	1.08270	1.11551	1.14831	1.18112	1.21393	1.24674	1.27955
4	1.31236	1.34517	1.37798	1.41079	1.44360	1.47640	1.50921	1.54202	1.57483	1.60764
5	1.64045	1.67326	1.70607	1.73888	1.77169	1.80449	1.83730	1.87011	1.90292	1.93573
6	1.96854	2.00135	2.03416	2.06697	2.09978	2.13258	2.16539	2.19820	2.23101	2.26382
7	2.29663	2.32944	2.36225	2.39506	2.42787	2.46067	2.49348	2.52629	2.55910	2.59191
8	2.62472	2.65753	2.69034	2.72315	2.75596	2.78876	2.82157	2.85438	2.88719	2.92000
9	2.95281	2.98562	3.01843	3.05124	3.08405	3.11685	3.14966	3.18247	3.21528	3.24809

The following tables, being based, like the preceding ones, upon the decimal system, can be used, not only for converting the simple units and fractions of the respective measures into the others, but also any numbers, the corresponding value of which does not exceed six figures. For this it suffices to move the decimal point to the right by as many figures as you add ciphers to the numbers in the first column. Take, for instance, the table for converting English feet into metres; you find in the first column and in the second, headed 0, 5 English feet = 1.52397 metre. By adding successively one cipher to the figure 5, indicating the English feet, and moving the decimal point accordingly, in the corresponding number of metres, you will have,

5 English feet = 1.52397 metre.
50 " = 15.2397 "
500 " = 152.397 "
5000 " = 1523.97 "
50000 " = 15239.7 "

and so on; it will be the same for each figure of the first column.

The numbers at the head of the vertical columns being tenths of those in the first column, they can be taken indiscriminately as fractions, or as units, or tens,

or hundreds, &c. Taking, for example, 6 English feet in the first column and 5 tenths in the fifth vertical column, we find,

6.5 English feet = 1.98116 metre.
or multiplying by ten, 65 " = 19.8116 "
or 650 " = 198.116 "
or 6500 " = 1981.16 "
or 65000 " = 19811.6 "

and so on with all the other numbers of two figures and their multiples by ten.

By means of a simple addition, we obtain the conversion of numbers with four figures. Say 9843 English feet to be converted into metres.

We find 9800 English feet = 2986.99 metres.
43 " = 13.106 "
or 9843 " = 3000.096 "

III. CONVERSION OF METRES INTO FRENCH TOISES.

1 Metre = 0.5130741 Toise.

Metres.	Decimetres.									
	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.
	Toises.	Toises.	Toises.	Toises.	Toises.	Toises.	Toises.	Toises.	Toises.	Toises.
0	0.00000	0.05131	0.10261	0.15392	0.20523	0.25634	0.30784	0.35915	0.41046	0.46177
1	0.51307	0.56438	0.61569	0.66700	0.71830	0.76961	0.82092	0.87223	0.92353	0.97484
2	1.02615	1.07746	1.12876	1.18007	1.23138	1.28268	1.33399	1.38530	1.43661	1.48792
3	1.53922	1.59053	1.64184	1.69314	1.74445	1.79576	1.84707	1.89837	1.94968	2.00099
4	2.05230	2.10360	2.15491	2.20622	2.25753	2.30883	2.36014	2.41145	2.46276	2.51406
5	2.56537	2.61668	2.66799	2.71929	2 77060	2.82191	2.87321	2.92452	2.97583	3.02714
6	3.07844	3.12975	3.18106	3.23237	3.28367	3.33498	3.38629	3.43760	3.48890	3.54021
7	3.59152	3.64283	3.69413	3.74544	3.79675	3.84806	3.89936	3.95067	4.00198	4.05328
8	4.10459	4.15590	4.20721	4.25851	4.30982	4.36113	4.41244	4.46374	4.51505	4.56636
9	4.61767	4.66897	4.72028	4.77159	4.82290	4.87420	4.92551	4.97682	5.02813	5.07943

IV. CONVERSION OF METRES INTO FRENCH FEET AND DECIMALS.

1 Metre = 3.078439 French Feet.

Metres.	Decimetres.									
	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.
	Fr. Feet.	Fr. Feet.	Fr. Feet.	Fr. Feet.	Fr. Feet.	Fr. Feet.	Fr. Feet.	Fr. Feet.	Fr. Feet.	Fr. Feet.
0	0.0000	0.3078	0.6159	0.9235	1.2314	1.5392	1.8471	2.1549	2.4627	2.7706
1	3.0784	3.3863	3.6941	4.0020	4.3098	4.6177	4.9255	4.2333	5.5412	5.8490
2	6.1569	6.4647	6.7726	7.0804	7.3883	7.6961	8.0039	8.3118	8.6196	8.9275
3	9.2353	9.5432	9.8510	10.1589	10.4668	10.7746	11.0825	11.3903	11.6982	12.0060
4	12.3138	12.6217	12.9295	13.2374	13.5452	13.8531	14.1609	14.4687	14.7766	15.0845
5	15.3922	15.7001	16.0080	16.3158	16.6237	16.9315	17.2394	17.5472	17.8551	18.1629
6	18.4707	18.7786	19.0864	19.3943	19.7021	20.0100	20.3178	20.6256	20.9335	21.2413
7	21.5491	21.8570	22.1649	22.4727	22.7806	23.0884	23.3962	23.7041	24.0120	24.3198
8	24.6275	24.9355	25.2433	25.5512	25.8590	26.1668	26.4747	26.7825	27.0904	27.3982
9	27.7060	28.0139	28.3217	28.6296	28 9374	29.2453	29.5531	29.8610	30.1688	30.4767

V. CONVERSION OF ENGLISH FEET AND DECIMALS INTO METRES.

1 English Foot = 0.30479449 Metre.

English Feet.	Tenths of a Foot.									
	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.
	Metres.	Metres.	Metres.	Metres.	Metres.	Metres.	Metres.	Metres.	Metres.	Metres.
0	0.00000	0.03048	0.06096	0.09144	0.12192	0.15240	0.18288	0.21336	0.24384	0.27431
1	0.30479	0.33527	0.36575	0.39623	0.42671	0.45719	0.48767	0.51815	0.54863	0.57911
2	0.60959	0.64007	0.67055	0.70103	0.73151	0.76199	0.79247	0.82295	0.85342	0.88390
3	0.91438	0.94486	0.97534	1.00582	1.03630	1.06678	1.09726	1.12774	1.15822	1.18870
4	1.21918	1.24966	1.28014	1.31062	1.34110	1.37158	1.40205	1.43253	1.46301	1.49349
5	1.52397	1.55445	1.58493	1.61541	1.64589	1.67637	1.70685	1.73733	1.76781	1.79829
6	1.82877	1.85925	1.88973	1.92021	1.95068	1.98116	2.01164	2.04212	2.07260	2.10308
7	2.13356	2.16404	2.19452	2.22510	2.25548	2.28596	2.31644	2.34692	2.37740	2.40788
8	2.43836	2.46884	2.49931	2.52979	2.56027	2.59075	2.62123	2.65171	2.68219	2.71267
9	2.74315	2.77363	2.80410	2.83459	2.86507	2.89555	2.92603	2.95651	2.98699	3.11747

VI. CONVERSION OF ENGLISH FEET INTO FRENCH TOISES.

1 English Foot = 0.1563822 Toise.

English Feet.	Tenths of a Foot.									
	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.
	Toises.	Toises.	Toises.	Toises.	Toises.	Toises.	Toises.	Toises.	Toises.	Toises.
0	0.00000	0.01564	0.03128	0.04692	0.06255	0.07819	0.09383	0.10947	0.12511	0.14074
1	0.15638	0.17202	0.18766	0.20330	0.21894	0.23457	0.25021	0.26585	0.28149	0.29713
2	0.31276	0.32840	0.34404	0.35968	0.37532	0.39096	0.40659	0.42223	0.43787	0.45351
3	0.46915	0.48478	0.50042	0.51606	0.53170	0.54734	0.56298	0.57861	0.59425	0.60989
4	0.62553	0.63117	0.64681	0.66244	0.67808	0.69372	0.70936	0.72500	0.74063	0.76627
5	0.78191	0.79755	0.81319	0.82883	0.84446	0.86010	0.87574	0.89138	0.90701	0.92265
6	0.93829	0.95393	0.96957	0.98521	1.00085	1.01648	1.03212	1.04776	1.06340	1.07904
7	1.09468	1.11031	1.12595	1.14159	1.15723	1.17287	1.18850	1.20414	1.21978	1.23542
8	1.25106	1.26670	1.28233	1.29797	1.31361	1.32925	1.34489	1.36052	1.37616	1.39180
9	1.40744	1.42308	1.43872	1.45435	1 46999	1.48563	1.50127	1.51691	1.53255	1.54818

VII. CONVERSION OF ENGLISH FEET INTO FRENCH FEET AND DECIMALS.

1 English Foot = 0.93829315. Paris Foot.

English Feet.	Tenths of a Foot.									
	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.
	Fr. Feet.	Fr. Feet.	Fr. Feet.	Fr. Feet.	Fr. Feet.	Fr. Feet.	Fr. Feet.	Fr. Feet.	Fr. Feet.	Fr. Feet.
0	0.00000	0.09383	0.18766	0.28149	0.37532	0.46915	0.56298	0.65681	0.75064	0.84446
1	0.93829	1.03212	1.12595	1.21978	1.31361	1.40744	1.50127	1.59510	1.68893	1.78276
2	1.87659	1.97042	2.06424	2.15807	2.25190	2.34573	2.43956	2.53339	2.62722	2.71050
3	2.81488	2.90871	3.00254	3.09637	3.19020	3.28403	3.37786	3.47168	3.56551	3.65934
4	3.75317	3.84700	3.94083	4.03466	4.12849	4.22232	4.31615	4.40998	4.50381	4.59764
5	4.69147	4.78530	4.87912	4.97295	5.06678	5.16061	5.25444	5.34827	5.44210	5.53593
6	5.62976	5.72359	5.81742	5.91125	6.00508	6.09891	6.19273	6.28656	6.38039	6.47422
7	6.56805	6.66188	6.75571	6.84954	6.94337	7.03720	7.13103	7.22486	7.31869	7.41252
8	7.50635	7.60017	7.69400	7.78783	7.88166	7.97549	8.06932	8.16315	8.25698	8.35081
9	8.44464	8.53847	8.63230	8.72613	8.81996	8.91378	9.00761	9.10144	9.19527	9.28910

VIII. CONVERSION OF FRENCH TOISES INTO METRES.

1 Toise = 1.949037 Metre.

Toises.	Tenths of a Toise.									
	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.
	Metres.	Metres.	Metres.	Metres.	Metres.	Metres.	Metres.	Metres.	Metres.	Metres.
0	0.0000	0.1949	0.3898	0.5847	0.7796	0.9745	1.1694	1.3643	1.5592	1.7541
1	1.9490	2.1439	2.3388	2.5337	2.7287	2.9236	3.1185	3.3134	3.5083	3.7032
2	3.8981	4.0930	4.2879	4.4828	4.6777	4.8726	5.0675	5.2624	5.4573	5.6522
3	5.8471	6.0420	6.2369	6.4318	6.6267	6.8216	7.0165	7.2114	7.4063	7.6013
4	7.7961	7.9911	8.1860	8.3809	8.5758	8.7707	8.9656	9.1605	9.3554	9.5503
5	9.7452	9.9401	10.1350	10.3299	10.5248	10.7197	10.9146	11.1095	11.3044	11.4993
6	11.6942	11.8891	12.0840	12.2789	12.4738	12.6687	12.8636	13.0586	13.2535	13.4484
7	13.6433	13.8382	14.0331	14.2280	14.4229	14.6178	14.8127	15.0076	15.2025	15.3974
8	15.5923	15.7872	15.9821	16.1770	16.3719	16.5668	16.7617	16.9566	17.1515	17.3464
9	17.5413	17.7362	17.9311	18.1260	18.3209	18.5159	18.7108	18.9057	19.1006	19.2955

IX. CONVERSION OF TOISES INTO FRENCH FEET.

1 Toise = 6 French Feet.

Toises.	Toises. (Units.)									
	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.
	Fr. Feet.	Fr. Feet.	Fr. Feet.	Fr. Feet.	Fr. Feet.	Fr. Feet.	Fr. Feet.	Fr. Feet.	Fr. Feet.	Fr. Feet.
0	0.00	6	12	18	24	30	36	42	48	54
10	60	66	72	78	84	90	96	102	108	114
20	120	126	132	138	144	150	156	162	168	174
30	180	186	192	198	204	210	216	222	228	234
40	240	246	252	258	264	270	276	282	288	294
50	300	306	312	318	324	330	336	342	348	354
60	360	366	372	378	384	390	396	402	408	414
70	420	426	432	438	444	450	456	462	468	474
80	480	486	492	498	504	510	516	522	528	534
90	540	546	552	558	564	570	576	582	588	594

X. CONVERSION OF FRENCH TOISES INTO ENGLISH FEET AND DECIMALS.

1 Toise = 6.394590 English Feet.

Toises.	Tenths of a Toise.									
	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.
	Eng. Feet.	Eng. Feet.	Eng. Feet.	Eng. Feet.	Eng. Feet.	Eng. Feet.	Eng. Feet.	Eng. Feet.	Eng. Feet.	Eng. Feet.
0	0.0000	0.6395	1.2789	1.9184	2.5578	3.1973	3.8368	4.4762	5.1157	5.7551
1	6.3946	7.0340	7.6735	8.3130	8.9524	9.5919	10.2313	10.8708	11.5103	12.1497
2	12.7892	13.4286	14.0681	14.7076	15.3470	15.9865	16.6259	17.2654	17.9049	18.5443
3	19.1838	19.8232	20.4627	21.1021	21.7416	22.3811	21.0205	23.6600	24.2994	24.9389
4	25.5784	26.2178	26.8573	27.4967	28.1362	28.7757	29.4151	30.0546	30.6940	31.3335
5	31.9729	32.6124	33.2519	33.8913	34.5308	35.1702	35.8097	36.4492	37.0886	37.7280
6	38.3675	39.0070	39.6465	40.2859	40.9254	41.5648	42.2043	42.8438	43.4832	44.1227
7	44.7621	45.4016	46.0410	46.6805	47.3200	47.9594	48.5988	49.2383	49.8778	50.5172
8	51.1567	51.7961	52.4356	53.0751	53.7145	54.3540	54.9935	55.6329	56.2724	56.9118
9	57.5513	58.1908	58.8302	58.4697	60.1091	60.7486	61.3881	62.0275	62.6670	63.3064

XI. CONVERSION OF FRENCH FEET INTO METRES.

1 French Foot = 0.32484 Metre.

French Feet.	Tenths of a Foot.									
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**
	Metres.	Metres.	Metres.	Metres.	Metres.	Metres.	Metres.	Metres.	Metres.	Metres.
0	0.00000	0.03248	0.06497	0.09745	0.12994	0.16242	0.19490	0.22739	0.25987	0.29235
1	0.32484	0.35732	0.38981	0.42229	0.45478	0.48726	0.51974	0.55223	0.58471	0.61720
2	0.64968	0.68216	0.71465	0.74713	0.77962	0.81210	0.84458	0.87707	0.90955	0.94204
3	0.97452	1.00700	1.03949	1.07197	0.10446	1.13694	1.16942	1.20191	1.23439	1.26688
4	1.29936	1.33184	1.36433	1.39681	1.42930	1.46178	1.49426	1.52675	1.55923	1.59172
5	1.62420	1.65668	1.68917	1.72165	1.75414	1.78662	1.81910	1.85159	1.88407	1.91656
6	1.94904	1.98152	2.01401	2.04649	2.07898	2.11146	2.14394	2.17643	2.20891	2.24140
7	2.27388	2.30636	2.33885	2.37133	2.40382	2.43630	2.46878	2.50127	2.53375	2.56624
8	2.59872	2.63120	2.66369	2.69617	2.72866	2.76114	2.79362	2.82610	2.85859	2.89108
9	2.92356	2.95604	2.98853	3.02101	3.05350	3.08598	3.11846	3.15095	3.18343	3.21592

XII. CONVERSION OF FRENCH FEET INTO FRENCH TOISES AND DECIMALS.

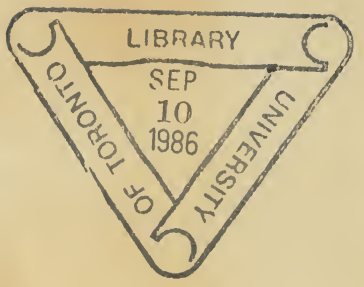
1 French Foot = 0.1666666 French Toise.

French Feet.	Tenths of a Foot.									
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**
	Fr.Toises.	Fr.Toises.	Fr.Toises.	Fr.Toises.	Fr.Toises.	Fr.Toises.	Fr.Toises.	Fr.Toises.	Fr.Toises.	Fr.Toises.
0	0.00000	0.01667	0.03333	0.05000	0.06667	0.83333	0.10000	0.11667	0.13333	0.15000
1	0.16667	0.18333	0.20000	0.21667	0.23333	0.25000	0.26669	0.28333	0.30000	0.31667
2	0.33333	0.35000	0.36667	0.38333	0.40000	0.41667	0.43333	0.45000	0.46667	0.48333
3	0.50000	0.51667	0.53333	0.55000	0.56667	0.58333	0.60000	0.61667	0.63333	0.65000
4	0.66667	0.68333	0.70000	0.71666	0.73333	0.75000	0.76666	0.78333	0.80000	0.81667
5	0.83333	0.85000	0.86667	0.88333	0.90000	0.91667	0.93333	0.95000	0.96667	0.98333
6	1.00000	1.01667	1.03333	1.05000	1.06667	1.08333	1.10000	1.11667	1.13333	1.15000
7	1.16667	1.18333	1.20000	1.21667	1.23333	1.25000	1.26667	1.28333	1.30000	1.31667
8	1.33333	1.35000	1.36667	1.38333	1.40000	1.41667	1.43333	1.45000	1.46667	1.48333
9	1.50000	1.51667	1.53333	1.55000	1.56667	1.58333	1.60000	1.61667	1.63333	1.65000

XIII. CONVERSION OF FRENCH FEET AND DECIMALS INTO ENGLISH FEET.

1 French Foot = 1.065765 English Foot.

French Feet.	Tenths of a Foot.									
	0.	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**
	Eng.Feet.	Eng.Feet.	Eng.Feet.	Eng.Feet.	Eng.Feet.	Eng.Feet.	Eng.Feet.	Eng.Feet.	Eng.Feet.	Eng.Feet.
0	0.00000	0.10658	0.21315	0.31973	0.42631	0.53288	0.63946	0.74603	0.85261	0.95919
1	1.06576	1.17234	1.27892	1.38549	1.49207	1.59865	1.70522	1.81180	1.91838	2.02495
2	2.13153	2.23811	2.34468	2.45126	2.55784	2.66441	2.77099	2.87757	2.98414	3.09072
3	3.19729	3.30387	3.41045	3.51702	3.62360	3.73018	3.83675	3.94333	4.04991	4.15648
4	4.26306	4.36964	4.47621	4.58279	4.68937	4.79594	4.90252	5.00910	5.11567	5.22225
5	5.32882	5.43540	5.54198	5.64856	5.75513	5.86171	5.96828	6.07486	6.18144	6.28801
6	6.39459	6.50117	6.60774	6.71432	6.82090	6.92747	7.03405	7.14062	7.24710	7.35367
7	7.46035	7.56693	7.67351	7.78008	7.88666	7.99324	8.09981	8.20639	8.31297	8.41954
8	8.52612	8.63270	8.73927	8.84585	8.95242	9.05900	9.16558	9.27216	9.37873	9.48531
9	9.59188	9.69846	9.80504	9.91162	10.0182	10.1248	10.2313	10.3379	10.4445	10.5511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